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UNDERGRADUATE ACADEMIC CATALOG

The Academic Catalog is intended to provide general information about the University of New Hampshire and program requirements. It is accurate at the time of publishing. The University reserves the right to change, modify, or correct any information contained herein without prior notice, at any time.

Degree, program requirements, and policies in the 2026/2027 Academic Catalog apply to students who enter the University between July 1, 2026 through June 30, 2027.

UNH Nondiscrimination Policy

Consistent with all applicable federal and state laws, rules, regulations and ordinances (e.g. Title III, Title VI, Title VII, Title IX, Section 504 of the Rehabilitation Act, and the Americans with Disabilities Act as amended), and in recognition of its responsibilities to its faculty, staff, and students as well as to the communities in which it operates, the University of New Hampshire affirms its continuing commitment to afford qualified or qualifiable individuals equal access and equal opportunity within the University. To ensure equal access and equal opportunity, the University of New Hampshire shall not discriminate against any individual or group because of race, color, national origin, religion, sex, sexual orientation, gender identity or expression, age, disability, marital status, military/veteran status, genetic information, or any other characteristic protected by federal, state, or local laws. Inquiries regarding discriminatory harassment (including sexual harassment or violence) should be directed to Bohdan J. Zaryckyj, Director of the Civil Rights and Equity Office and Title IX Coordinator, Room 305, Thompson Hall, 105 Main Street, Durham, N.H. 03824, bo.zaryckyj@unh.edu, phone (603) 862-2930 (voice), 7-1-1 (Relay NH), (603) 862-2936 (fax); or to the Office for Civil Rights, U.S. Department of Education, 400 Maryland Ave, SW, Washington, D.C., 20202-1475, phone (202) 453-6020, fax (202) 453-6021, e-mail OCR.DC@ed.gov.

See the UNH Nondiscrimination Policy and/or UNH Sexual Misconduct Policy for information about the resolution of complaints regarding discrimination, discriminatory harassment, sexual harassment, and other forms of sexual misconduct. Further information may be obtained at the Civil Rights and Equity Office or via e-mail unh.civilrights@unh.edu.

About the Catalog

The University provides information pertaining to the Family Educational Rights and Privacy Act of 1974 (the "Buckley Amendment") in the annual student publication, Student Rights, Rules, and Responsibilities. The annual student publication, Student Rights, Rules, and Responsibilities, also contains University regulations and policies regarding student conduct.

The University will supply information about the employment of its graduates who have graduated from our degree and/or certificate programs. This information may be obtained upon request from the University's office of Career and Professional Success and is available by university, college, or school to current and prospective students. Information on employment outcomes depends on student self-reporting. The University does not guarantee employment to its graduates. Chances for employment are enhanced if students have begun career planning early in their degree programs.

Program descriptions may vary from the actual content or requirements because of advancements in the discipline or the active nature of academic planning and decision making. Accordingly, the University reserves the right to make whatever changes are deemed necessary in schedules, course content, requirements, academic programs (including their termination), calendar, tuition and fees, services, or any other aspect of the University's operations, giving whatever notice thereof is reasonable under the circumstances. Therefore, the provisions of this catalog are not an irrevocable contract between the students and the University. The University is also not responsible for failure to provide or for delay in providing expected services and/or facilities when such failure arises from causes beyond the reasonable control of the University.

Academic Calendar

The academic calendar provides important dates for the university's academic periods, including the start and end of classes, holidays, exams, and other key academic events. The University's Master Academic Calendar website provides all detailed academic dates and deadlines related to grades, course registration, graduation, financial and more.

Coursework must be completed by students prior to the last day of classes for a related academic period (semester or term) in which the course is offered.

Academic Core Calendar (2026/2027)

Fall 2026

Full Semester Classes Begin	August 31
Term 1 Classes Begin	August 31
Labor Day, University Holiday	September 7
Mid-Semester Break; no classes	October 12
Classes Follow a Wednesday Schedule	October 13
Mid-Semester	October 16
Term 1 Last Day of Classes	October 23
Term 2 Classes Begin	November 2
Election Day - no exams scheduled	November 3
Veteran's Day, University holiday	November 11
No Classes	November 25
Thanksgiving holiday	November 26-27
Classes resume	November 30
Full Semester Last day of classes	December 14
Reading day, final exams begin at 6:00 p.m.	December 15
Final Exams end	December 22
Term 2 Last Day of Classes	December 24

January Term 2027

Online classes & trips begin	December 28
New Year's Day; University Holiday	January 1
On campus classes begin	January 4
Martin Luther King, Jr. Day; University Holiday	January 18
Last day of classes	January 22

Spring 2027

Full Semester Classes Begin	January 26
Term 3 Classes Begin	January 26
Mid-Semester	March 12
Term 3 Last Day of Classes	March 19
Spring recess	March 22-26
Full Semester Classes resume	March 29
Term 4 Classes Begin	March 29
Full Semester Last day of classes	May 10
Reading Day	May 11
Final exams begin	May 12
Final exams end	May 18
Term 4 Last Day of Classes	May 21
May Graduation - Degree Conferral Date	May 22

Summer 2027

Full Semester Classes Begin	May 24
Summer I Classes Begin	May 24
Summer II Classes Begin	May 24
Memorial Day, University Holiday	May 31
Term 5 Classes Begin	June 1
Summer III Classes Begin	June 7
Juneteenth, University Holiday (Observed)	June 18
Summer I Last Day of Classes	June 25
Summer IV Classes Begin	June 28

Independence Day, University Holiday (Observed)	July 5
Term 5 Last Day of Classes	July 23
Summer II Last Day of Classes	July 30
Summer III Last Day of Classes	July 30
Summer IV Last Day of Classes	July 30
Full Semester Last Day of Classes	August 6

Academic Policies and Procedures

It is the student's responsibility to become familiar with the academic policies and procedures of the University as well as the requirements for academic programs.

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Academic Integrity

Academic integrity is a core value at the University of New Hampshire. The members of its academic community both require and expect one another to conduct themselves with integrity. This means that each member will adhere to the principles and rules of the University and pursue academic work in a straightforward and truthful manner, free from deception or fraud. The Academic Integrity policy can be found in the annual publication of the Student Rights, Rules, and Responsibilities.

Academic Petitions

Exceptions to academic policies and procedures are rare and made for documented, compelling, non-academic reasons. Requests are considered through a petition process (e.g., a suspension, extension of incomplete, curriculum requirements, etc.)

Petition forms to request variance in academic policy.

Academic Standing & Exclusion, Suspension or Dismissal

Good Standing

Students who earn a semester and cumulative GPA of 2.0 or higher are in good standing.

First Semester Students

First-semester freshman who have attempted at least 12 semester hours and have a semester GPA between 1.0 and 1.49 will be subject to exclusion. First-semester freshman and transfer students who have attempted at least 12 semester hours and have a semester GPA below 1.0 will be subject to suspension.

Academic Exclusion Hold

An Academic Exclusion hold is a temporary registration hold. If not resolved, a student's degree status may be changed to Degree Status Discontinued, Academic Suspension or Academic Dismissal. If an Academic Exclusion hold is not promptly addressed, a student's course registration and University housing will be canceled.

Academic Suspension

Students whose GPA falls below the minimum required GPA relative to their attempted semester credit hours and/or who have demonstrated insufficient progress toward their degrees may be placed on Academic Suspension. Students suspended from the University for academic reasons will not be permitted to return until one regular UNH academic semester (fall or spring) has elapsed from the time of suspension. Therefore, students will not be eligible to take any UNH courses during the period of required separation, whether offered in Durham, Manchester, the College of Professional Studies - Online, or through Continuing Education. Students suspended for any reason will not earn transfer credit for courses taken during the period of required separation.

A suspended student may not participate in any student activities, live in university housing, or be a member of any recognized student organization.

Academic Dismissal

Students who have been placed on Academic Suspension once and whose cumulative GPA remains below the minimum must be dismissed. Only under extraordinary circumstances will a student be readmitted after Academic Dismissal. Students who have been placed on Academic Dismissal may take courses through Continuing Education after one regular UNH semester has elapsed. A dismissed student may not participate in any student activities, live in university housing, or be a member of any recognized student organization.

Return after Academic Suspension

Durham and Manchester students that wish to return from Academic Suspension must complete a Reactivation from Academic Suspension or Leave of Absence Form. College of Professional Studies - Online students should complete a Request to Reactivate. Requests to return are reviewed by the student's Dean's Office or Director of Academic Advising based on home college. Students must provide a statement explaining why they believe they can successfully complete a UNH degree program and specific steps they will take to ensure future academic success. If approved, the student will be reinstated into the major they left and will receive confirmation from the Office of the Registrar. If the student no longer qualifies for the major they left, their request for return will be reviewed by the College of Liberal Arts Dean's Office for reactivation into the Undeclared major.

The Reactivation from Academic Suspension or Leave of Absence form must be submitted no later than 2 weeks before the semester of return begins. A student suspended or dismissed in January may enroll in the following Summer Term with permission from their dean's office.

Return after Academic Dismissal

Only under extraordinary circumstances will a student be readmitted after an Academic Dismissal. Students must consult their former home college Dean's Office prior to applying for readmission through the Office of Admissions.

Appeals

Durham and Manchester students seeking to appeal an Academic Suspension or Dismissal must submit a Petition for Variance in Academic Policy form to their home college Dean's Office. The Academic Standards and Advising Committee will review these appeals. College of Professional Studies - Online students must submit a General Petition form. Cancellation of academic actions will only be granted for documented, compelling, non-academic reasons.

Courses after Academic Suspension or Academic Dismissal

Summer Term: A student suspended following a Spring Semester that was enrolled in a summer session course before being notified of the suspension will be allowed to complete the course(s), but will not be allowed to register for additional summer courses. These courses may be considered in appealing a Spring Semester Academic Suspension.

January Term: A student suspended or dismissed in following a Fall Semester that was enrolled in a January Term (J-Term) course before being notified of the suspension will be allowed to complete the course, but will not be allowed to register for additional January Term Courses. Courses taken during a January Term may not be used in appealing a Fall Semester Academic Suspension.

Accelerated Master's and Certificates

Qualified senior students at the University of New Hampshire may be admitted to an **approved accelerated graduate program** in the Graduate School provided they have followed normal application procedures# they must have been admitted for the semester in which they wish to enroll in courses for dual credit. A 3.20 cumulative grade point average is normally required to be considered for the program. Students are normally admitted prior to the start of their senior year. Students who have been admitted to the program may register for a maximum of 12 credits of 800-level courses prior to completing their bachelor's degree. Such courses may, upon recommendation of the department and approval of the Graduate School, count toward both the bachelor's and master's degrees. Up to 8 credits, upon recommendation of the department and approval of the Graduate School, may count towards both the bachelor's degree and a graduate certificate. For more information and a list of eligible programs, visit: https://gradschool.unh.edu/academics/accelerated-masters-program.

Adding Courses

Students may add a course to their schedule through the end of the add period. The addition may be made in Webcat. Some courses may be restricted or require permission, in which case students should consult with their advisor or the department, on feasibility and process to add that course.

A student may add a course after the add deadline only for compelling reasons, which must be presented in a petition for variance in academic policy signed by the course instructor and approved by the student's advisor and the student's academic dean or their designee.

All registration deadlines can be found on UNH's master academic calendar.

WEBCAT Registration Deadlines

- Webcat registration deadline dates for adding courses are set based on the below logic for reference.
- Webcat registration closes on the last day to add at 11:59 p.m.

Fall Semester	Last day to Add Course
Full Term	Second Friday
Full Term - Grad Thesis	Third Friday
Term 1	First Friday
Term 2	First Friday

January Term	Last day to Add Course
Full Term	First Day of Classes
On Campus	First Day of Classes
Online	First Day of Classes
Study Away	First Day of Classes

Spring Semester	Last day to Add Course
Full Term	Second Friday
Full Term - Grad Thesis	Third Friday
Term 3	First Friday
Term 4	First Friday

Summer	Last day to Add Course
Full Term	July 1st
Term 5	First Friday
Summer Session I	Fifth Business Day of Classes
Summer Session II	Tenth Business Day of Classes
Summer Session III	Eighth Business Day of Classes
Summer Session IV	Fifth Business Day of Classes
Special Summer Session*	*Count Weeks of Course: one business day of add per week of the course

Attendance Policy

Regular class attendance is essential to academic success. Students are expected to attend scheduled class sessions, as consistent participation supports learning, engagement with course material, and progress toward educational goals. At the same time, the University recognizes that unexpected circumstances can interfere with a student's ability to attend class or complete academic work as planned. This policy establishes broad expectations for attendance across the University while providing pathways for reasonable flexibility when circumstances warrant it. Specific attendance requirements for each course are determined at the discretion of the faculty based on the essential requirements of the course and outlined in the course syllabus.

Student Responsibility

Students are expected to attend course meetings and adhere to the schedule of assignments as described in the syllabus. Further, students are expected to proactively communicate with their faculty when circumstances will prevent them from attending class or completing academic work. This communication should happen as early as possible and is the student's responsibility regardless of the reason for the absence. Students should also be prepared to reach out and proactively ask faculty if they are unsure of what is expected of them in the course, as related to their absences or in general.

Attendance Flexibility

Students may request flexibility for a wide variety of reasons. Some of these requests are required by law or specifically approved by the university, while others are general requests that do not rise to the need for formal accommodation but may still warrant consideration.

- **Faculty** – Faculty have discretion to work flexibly with students by setting general attendance policies for their course. In compliance with the Excused Absence section of this policy, faculty are responsible for managing general absence requests, determining when absences may be excused, and short-term absences (students missing one or two days of class). With the exception of medical documentation, faculty may request proof or documentation of absences from students for requests to excuse absences.
- **Dean of Students** – Dean of Student's Letters represent the university's acknowledgment that a student requires additional flexibility for a temporary period due to extenuating circumstances that interfere with the student's ability to complete academic requirements. Dean of Students Letters inform faculty that a student is managing a significant temporary situation. While specific accommodations are at faculty discretion, faculty are expected to work with the student in a flexible manner. Dean of Student's Letters are not issued for situations where students are missing only one or two days of class. More information can be found on the Dean of Students website.
- **Student Accessibility Services (SAS)** - SAS approves accommodations for students with disabilities. Compliance with accommodation implementation is mandatory as per the Americans with Disabilities Act (ADA). Students who are approved for flexibility accommodations (attendance and/or assignments) are eligible for additional flexibility beyond what is in the course syllabus. It is highly recommended that faculty work with SAS to proactively create

a "Flexibility Agreement" to ensure a clear understanding of what flexibility is available for the course.

- **Civil Rights and Equity Office** - The Civil Rights and Equity Office (CREO) can provide assistance with requests for academic flexibility for students who have been impacted by Sexual Misconduct (Title IX) or by Bias/Discrimination based on a protected identity. CREO works with students and their faculty members to arrange appropriate support within current UNH policy and Federal Regulations.

Absences from examination and laboratory periods

Any student who is absent without excuse from an announced test, quiz, examination, or laboratory period may, at the discretion of the instructor, be penalized for such absence or be allowed or disallowed to make up the work missed.

Excused absences

Discretionary Absences. Reasons that faculty **may** excuse student absences include: (a) ill health, (b) personal emergencies, (c) instructional trips, and (d) when students are representing UNH in regional, national, and international academic-related opportunities. In these cases, faculty have discretion regarding what flexibility to offer based on their syllabus policies.

Required Excused Absences. Reasons that faculty must excuse student absences are: (a) participation in official NCAA intercollegiate athletic events (more information can be found in the Intercollegiate Athletics section of this policy), (b) participation in official adaptive sports events facilitated by Northeast Passage, (c) jury duty, (d) required military service, (e) required court appearances, and (f) religious holidays and/or observances. A partial list of religious observances is available on the Civil Rights & Equity Office website, though faculty should be aware this list is not exhaustive. In these cases, it is required that students are not penalized for missed assignments or missed class. Faculty may still set expectations regarding how students make up missed work and learn missed content. Faculty may also request documentation regarding official intercollegiate events, adaptive sports, required military service, and jury duty. Excused absences do not automatically waive the academic standards, learning outcomes, or essential requirements of a course. When the length or nature of the absence may affect the student's ability to complete course requirements, the student should consider other academic options such as dropping/withdrawing from the course, pursuing an incomplete, or taking a leave of absence.

Absence on voting day

To support UNH students in exercising their constitutional right to vote in New Hampshire state and federal elections, no examinations will be scheduled on the first Tuesday of November, and such should be designated in the University calendars. Where possible, students are encouraged to vote at a time that does not conflict with their academic obligations. However, opportunities for makeup of other scheduled exercises on those days should be provided where necessary. Faculty are requested to cooperate to the fullest extent with students from communities scheduling elections at other times.

Intercollegiate Athletics

Student-athletes have the responsibility of notifying each of their instructors before the end of the add/drop period about any possible conflict between scheduled class meetings, exams, or assignment due dates and scheduled athletic contests, especially those involving travel off-campus. Such notification shall be in writing or by email and shall include specific information about the dates the student will not be in class nor available for an exam.

Faculty must be flexible and offer reasonable accommodations for student-athletes whose schedule of official intercollegiate athletic contests requires them to be absent from class or miss scheduled quizzes, exams, or assignment due dates. The specific accommodation offered shall be determined by the faculty member. However, given that student-athletes represent the University when participating in competitions away from campus, absence by student-athletes resulting from their travel to or participation in a regularly-scheduled intercollegiate athletic contest, about which the faculty member has been properly notified, shall not incur an academic penalty (i.e., lower grade), even when a portion of the grade in a course is based on attendance.

No class time shall be missed for practice or other unofficial activities except when a team is traveling to an away-from-home contest and the practice is in conjunction with the contest. Faculty members may not excuse student-athletes from class, or from an exam, quiz, or assignment, because of a conflict with regularly-scheduled athletic practices.

In the event of a conflict between final exams and a scheduled athletic contest, student-athletes have the responsibility to notify as soon as possible the instructor(s) of the course(s) involved in the conflict. Student-athletes have the option of requesting a rescheduling of the exam or using an official team exam proctor, typically arranged by the athletic department academic support staff, and faculty members shall make every reasonable effort to accommodate student-athletes. The final decision regarding rescheduling exams or assignment of alternate coursework remains with the faculty member. More information about Intercollegiate Athletics including a full list of our recognized NCAA teams can be found on the Athletics website.

Auditing Courses

Students may request to audit a course, which allows attendance without receiving academic credit, with approval from the student's assigned academic advisor and the course instructor.

- The registration period to audit a course opens when non-degree student registration begins.
- The deadline for designating a registered course to audit is the the last day to drop without academic liability.
- The instructor will determine requirements for attendance, participation, and any written work.
- Audits appear on the academic record with a grade notation of 'AU'; no credits are earned.
- Students who do not meet the criteria set by the instructor will be dropped from the course.
- Subsequent requests for change to audit will be by petition for variance in academic policy signed by the course instructor and approved by the student's advisor and the student's academic dean or their designee.
- Tuition varies for audit courses; see Fees and Expenses for details.
- To request designation of a course to audit complete an Audit a Course Form.
- Credit Load: An academic petition is required to request permission to audit courses that will exceed the maximum credit load policy limits.

- January Term: An academic petition is required to request permission to audit January Term courses.

Change of College

An undergraduate degree candidate may change from one college in the University to another only with the approval of the academic deans and departments of the colleges involved by submitting a request through the online change of major process or by submitting a change of campus request. This change must be approved by the academic department of the major to which the student wishes to transfer. Degree candidates in undergraduate online programs and any associate degree candidate must apply through the Office of Admissions to change colleges.

Students changing campuses from the UNH Durham or UNH Manchester campus to the College of Professional Studies Online are deactivated from their previous UNH campus. Students have until the end of the add/drop period of their first term of enrollment in a CPS Online program to request a change back to their previous campus, UNH Durham or UNH Manchester, by contacting registrars.office@unh.edu. After that time, students must submit a new application form in order to return to a UNH Durham or Manchester program. Students enrolled in a CPS Online program are no longer eligible to partake of the various campus resources at the Durham or Manchester campus, including, but not limited to, student events and organization involvement, the student recreation center, athletics events, and Health and Wellness. CPS Online students do not pay these mandatory UNH Durham or Manchester student fees and therefore are not eligible to utilize these services. In addition, CPS Online students are not eligible to enroll in the Student Health Benefits Plan.

Change of Major

Students may change their curriculum or major to another within the same college by submitting a request through the online change of major process. This change must be approved by the academic department of the major to which the student wishes to transfer.

Students with dual majors must maintain a 2.5 grade point average to continue as dual majors.

Degree candidates in undergraduate online programs must initiate a change of major with their academic advisor.

Class Level

University of New Hampshire undergraduate degree candidates are assigned class levels on the basis of credit hours of academic work completed with a passing grade as follows:

Baccalaureate Degree Candidates:

- Freshmen 0-25 credit hours
- Sophomore 26-57 credit hours
- Junior 58-89 credit hours
  - (Applied BS/Senior 58+ credit hours)
- Senior 90+ credit hours

Associate Degree Candidates:

- Freshmen 0-25 credit hours
- Senior Associate's 26+ credit hours

Cognate

A cognate is a coherent set of courses in a discipline or interdisciplinary grouping aimed at enhancing career-oriented skills in high demand in the employment market. A cognate will typically consist of 12 or more credits with C or better and a 2.00 grade-point average in courses in the cognate.

Cognate Programs

Commencement

Commencement refers to the formal annual event ceremony held in May. Commencement is organized by University Ceremonies and Events. Walking in the Commencement ceremony does not mean your degree has been officially conferred.[1]

Eligibility to Participate

- Must be within 8 credits of completing degree requirements. *If not within 8 credits, students may petition their college dean for permission to participate.*
- Must have applied to graduate for May, or the following September or December.
- Previous September and December graduates will be invited to participate by the Commencement office.

Register to Participate

Students must register to participate in Commencement after applying to graduate with the Office of the Registrar.
All details and information is available from University Ceremonies and Events.

[1]Degree Conferral refers to the official academic action processed by the Office of the Registrar after graduation certification confirming the successful completion of all degree requirements.

Communications

Communication to Students

University communications are sent to students through the following channels:

WEBCAT

Students receive billing statements, register, and view grades, student accounts, and financial aid awards through Webcat, a part of MyUNH.

UNIVERSITY E-MAIL

Important notifications are sent to students by many departments and offices via a UNH e-mail address that is assigned by the University. Students are responsible for checking this e--mail address on a regular basis.

MYUNH

Course material and University announcements are available through MyUNH, a student portal system.

MAIL TO PERMANENT ADDRESS

Some notifications are sent in the student's name to the permanent mailing address.

Core Curriculums

Discovery Program & Requirements (p. 22)
(Durham & Manchester Students)

General Education Program & Requirements (p. 34)
(College of Professional Studies Online Students)

Writing Program & Requirements (p. 45)
(All Undergraduate Students)

Corequisite

A course corequisite is a class that a student is required to take at the same time as another specific course.

For example, a science lecture may have a lab as a corequisite, meaning students must enroll in both the lecture and the lab in the same semester.

Course Numbering System

The University of New Hampshire's system of numeric designation is as follows:

- **200–299** Historical courses in Thompson School of Applied Science.
- **300–399** Reflected in Aerospace Studies (AERO) courses.
- **400–499** Introductory courses generally not carrying prerequisites and courses generally falling within University and college requirements.
- **500–599** Intermediate-level courses for undergraduate credit only.
- **600–699** Advanced-level undergraduate courses. Entrance to courses numbered 600 and above normally requires junior standing.
- **700–799** Advanced-level undergraduate courses. Ordinarily not open to freshmen and sophomores.
- **800–999** Courses that carry graduate credit only and therefore are open only to admitted or special graduate students.

Credit Hour Policy

Credit Hour Policy

The University of New Hampshire is in compliance with the federal definition of credit hour. For each credit hour, the University requires, at a minimum, the equivalent of three hours of student academic work each week assuming a 15-week semester (student workload for shorter length terms must be increased proportionally per week to maintain required approximately 45 hours of work per credit per term). Academic work includes, but is not limited to, direct faculty instruction, e-learning, recitation, laboratory work, studio work, fieldwork, performance, internships, and practica. Additional academic activities include, but are not limited to, readings, reflections, essays, reports, inquiry, problem solving, rehearsal, collaborations, theses, and electronic interactions. Student work reflects intended learning outcomes and is verified through evidence of student achievement.

Credit Load

Degree Students

Fall and Spring semesters

Undergraduate degree students may enroll for a maximum of 20 credits. Students who wish to exceed 20 credits must petition their college dean and are subject to a tuition overload surcharge (p. 60).

Undergraduate degree student registration is limited to a maximum of 19 credits during the priority registration period (p. 41), except in majors requiring more than 19 credits. Students should consult with their academic advisor.

Continuing students may add additional courses to register up to a maximum of 20 credits on the third Monday in July for **Fall** semester, and the Tuesday before classes begin for **Spring** semester. Minimum GPAs are required as follows PAUL 3.0, all other colleges 2.0.

Part-Time Students (enrolled in less than 12 credits): undergraduate degree students may attend on a part-time basis. No special permission is required, it is not necessary to withdraw or register through Continuing Education. Students must contact Student Accounts regarding billing adjustments.

Summer Session
Undergraduate students may enroll for a maximum of 12 credits. Students who wish to exceed 12 credits in the Summer must contact their their college dean to petition the Academic Standards and Advising Committee for an exception.

January Term
All students are limited to registering for one course and a maximum of 4 credits. Exception: Students may register for more than one course provided the courses DO NOT meet concurrently and the total credits do not exceed the 4 credit maximum.

Non-Degree Students

See Continuing Education, non-degree student credit load policies.

Cross Campus Registration

Eligibility of undergraduate students to register for courses offered by a UNH campus other than the students affiliated campus follows the general rules below.

General Rules

- **Durham Students**
  - May enroll in courses offered by the College of Professional Studies (CPS) Manchester campus.
  - Fall & Spring: May enroll in courses offered by the College of Professional Studies (CPS) Online campus with permission of their home college dean's office.
  - Summer: May enroll in courses offered by the College of Professional Studies (CPS) Online campus.
- **College of Professional Studies (CPS) - Manchester Students**
  - May enroll in courses offered by the Durham campus.
  - May enroll in courses offered by the College of Professional Studies (CPS) Online campus.
- **College of Professional Studies (CPS) - Online Students**
  - May enroll in courses offered by the College of Professional Studies (CPS) Manchester campus.
  - May enroll in courses offered by the Durham campus.

Notes

- Affiliated campus is designated by the campus of the students primary major.
- Students should consult with their academic advisor to determine courses appropriate for cross campus registration.
- Cross campus registration is limited by space availability in courses.
- Courses may have additional campus, college, or major restrictions or require special permission to register.
- A comprehensive schedule of course offerings is published online and includes information about any additional registration restrictions.

Degree Evaluation

Degree Works is the degree evaluation and audit tool available to students, faculty and advisors to view progress toward degree completion. It assists in planning coursework and includes a "what-if" feature to evaluate an academic record against other UNH majors when considering a change.

It is a student's responsibility to monitor degree progress and ensure all requirements are met.

Degrees & Requirements

Requirements in this catalog apply to students who enter the University between July 1, 2026 and June 30, 2027.

Student Responsibility

A student is held responsible for all work required for graduation and for the scheduling of all the necessary courses. Either faculty or PAT (Professional, Administrative, and Technical) staff members may serve as academic advisors depending on departmental procedures. Academic advisors typically help students both schedule classes that meet university and departmental requirements and monitor their progress throughout their academic career. Either academic advisors or other staff of the associated department/college may assist students in various ways, for example to learn of internships and post-graduation opportunities, and they may direct students to relevant support services when appropriate.

Academic Catalog Year

Students must follow the rules and policies of the academic catalog in effect at the time of their admission into a degree program for all University requirements. Students follow the major requirements that are in effect during the academic catalog year the student entered the major program. A student may petition the academic department and dean's office to follow a prior or, if applicable,#future#set#of#major#requirements.#The#student's Core Curriculum, Writing Program, and other graduation requirements remain in effect from the academic catalog year of matriculation. The Office of the Registrar will use the approved petition to update the student's major or core academic catalog year.

Associate Degrees

- Associate in Applied Science (AAS)
- Associate in Arts (AA)
- Associate in Science (AS)

In addition to the particular requirements for specific degrees and the major, all candidates for an associate's degree must obtain a passing grade in a minimum of 60 or 64 credits as indicated in the program degree requirements in courses numbered 400-799, must maintain a cumulative grade-point average of at least 2.00 for all courses taken at the University in which a grade is given, and must successfully meet the designated core curriculum (Discovery or General Education Program), and residence requirements as indicated in the degree requirements for the program.

Baccalaureate Degrees

- Applied Bachelor of Science (ABS)
- Bachelor of Arts (BA)
- Bachelor of Fine Arts (BFA)
- Bachelor of Music (BM)
- Bachelor of Science (BS)

In addition to the particular requirements for specific degrees and the major, all candidates for a bachelor's degree must obtain a passing grade in a minimum of 90, 120 or 128 credits as indicated in the program degree requirements in courses numbered 400-799, must maintain a cumulative grade-point average of at least 2.00 for all courses taken at the University in which a grade is given, and must successfully meet the designated core curriculum (Discovery or General Education Program), Writing Program, foreign language (required for Bachelor of Arts) and residence requirements as indicated in the degree requirements for the program.

Discovery Program & Requirements

UNH Durham and Manchester Undergraduate Degree Programs

The Discovery Program provides the intellectual framework for students in any major. It represents the faculty's collective belief in what constitutes and contributes to essential knowledge of the world. Together, students and faculty attempt to understand fully and use ethically that knowledge, both in the present and as a reservoir from which to draw in the future. These intellectual skills, knowledge, and ethical grounding will help prepare students to contribute to the creation of a more sustainable, healthy, just, and prosperous world.

> *"He who learns but does not think is lost. He who thinks but does not learn is in great danger." Confucius.*

Discovery Program Student Learning Outcomes

After completing the Discovery Program at UNH, students should be able to:

1. Communicate effectively by applying skills in reading, writing, speaking, and listening.
2. Acquire and use information appropriately and effectively to research, organize, and present knowledge.
3. Apply mathematical concepts and/or statistical models to understand phenomena and/or solve problems in multiple contexts.
4. Formulate and evaluate open-ended questions that lead to empirical/researchable investigations of complex problems and issues.
5. Analyze and synthesize ideas and perspectives from diverse traditions from around the world.
6. Analyze and synthesize ideas and perspectives from more than one academic or intellectual discipline.

7. Clarify connections between their academic learning and their own ethical values.
8. Demonstrate the integration of learning they have achieved in their major field of study.
9. Exercise imagination in grappling with complex problems of both the natural and human created worlds, and understand the centrality of imagination to all human endeavors.
10. Make connections among the various branches of human knowledge and endeavor.

Discovery Program Requirements

Discovery Foundation Skills

Inquiry course. This course may fulfill a Discovery category and/or a departmental requirement. It should be taken during a student's first or second year or prior to completion of 57 credits. For students who transfer in with 26 or more credits, the Inquiry requirement is waived automatically.

One course in writing skills. Most students will satisfy the first-year writing requirement with ENGL 401 First-Year Writing. This course should be taken during a student's first year or prior to completion of 32 credits.

One course in quantitative reasoning. This course is normally completed by the end of the first year or 32 credits.

Discovery in the Disciplines

Students must take one course from each Discovery category at the 400-600 levels. Inquiry courses that carry Discovery category designations may be used to satisfy this requirement.

- One course in Biological Science (BS);[1]
- One course in Physical Science (PS);[1]
- One course in Environment, Technology, and Society (ETS);
- One course in Fine and Performing Arts (FPA);
- One course in Historical Perspectives (HP);
- One course in Humanities (HUMA);
- One course in Social Science (SS); and
- One course in World Cultures (WC) (also may be satisfied by approved study abroad programs).

[1] One of these courses must have a Discovery lab component (DLab).

Discovery and Integrative Understanding

One senior capstone experience, supervised and approved within the major.

The capstone experience is typically completed by senior students within the major and is designed to elicit opportunities for educational reflection and synthesis of knowledge and skills; however, students who have completed 90 credits at the end of their junior year may complete their capstone during the summer prior to their senior year. The capstone may be met with an approved experience (as described below). It is not necessarily a course.

Suggested ways of meeting capstone may include: Hamel Center for Undergraduate Research Programs (IROP, SURF USA, URA, INCO 790 Advanced Research Experience), and senior honors theses. Examples of capstone experiences include courses, projects, independent research, internships, artistic expression, or community and service learning opportunities.

The senior capstone experience must meet one or more of the following criteria:

The capstone synthesizes and applies disciplinary knowledge and skills. The capstone fosters reflection on undergraduate learning and experience. The capstone demonstrates emerging professional competencies. The capstone applies, analyzes, and/or interprets research or data or artistic expression. The capstone explores areas of interest based on the integration of prior learning. The capstone requirement will vary across departments and colleges and may be satisfied through a course, thesis, created work or product, mentored research project, or some form of experiential learning (e.g., fieldwork). The capstone should occur during the student's senior year. Departments designate capstones as appropriate to their respective disciplines following the usual administrative procedures for their college or school. Departments are responsible for certifying that graduating seniors have met the capstone requirement for their majors.

Additional Information

Discovery Program requirements shall not be waived on the basis of special examinations or placement tests, except for the College Board Advanced Placement tests and the College Level Examination Program (CLEP) tests. All students transferring to UNH will come in under Discovery Program requirements. For students who transfer in with 26 or more credits, the Inquiry requirement is waived automatically.

Note to Faculty: Students may petition the Discovery Committee to replace a requirement. The student's petition must be approved by the student's major adviser and forwarded to the Dean of the student's college.

The required courses cannot be taken on a pass/fail basis. No single course may be counted in more than one Discovery discipline category. Academic departments may or may not permit Discovery courses to count toward requirements for a major. TSAS courses may not be used for general-education (1984-2009), writing-intensive, or foreign language requirements. TSAS courses that are 400-600 level and Discovery-approved may count for Discovery requirements. All Discovery courses carry 3-4 credits.

Discovery Foundations

Inquiry

All Inquiry courses must contain four individually necessary and collectively sufficient features:

Inspire curiosity: an Inquiry student will compose open-ended questions that lead to further investigation into increasingly focused problems and issues. Develop understanding and perspective: an Inquiry student will explain a central issue or question of the course using at least two unique perspectives. Clarify standards of thinking: an Inquiry student will be able to identify, compare, and evaluate different interpretations (hypotheses, explanations) of a given phenomenon. Create effective communicators: an Inquiry student will present in clearly organized form the results of the investigation into questions or problems the student has posed.

Writing Skills

Please refer to the University Writing Requirement section for complete information about this Discovery Foundation.

Quantitative Reasoning

Quantitative reasoning refers to the ability to think critically and analytically using abstract formal methods with broad application. Mathematics is the foundation for the physical sciences and, increasingly, for the biological sciences. Its principles and processes illuminate significant aspects of the social sciences as well. In its most precise forms, it enables the design of bridges and the orbiting of satellites. Mathematics discloses invisible truths about the world, makes sense of patterns of which we may or may not be aware, and introduces some order to chaos. In its purest form, it creates its own world of beauty and logic. In its more applied forms, it attempts to make sense of individual and collective human behaviors and complex systems. Many courses listed under this category will help students appreciate the principles of mathematics and gain some skill in its applications to realistic situations, while other courses will introduce kindred subjects including symbolic logic, information theory, statistics, and computer science.

Student Learning Outcomes - Quantitative Reasoning

- Demonstrate proficiency in carrying out college-level mathematical procedures.
- Use college-level mathematical thinking to analyze situations and data and to solve

Discovery in the Disciplines

Biological Science

Biology is a branch of science that investigates the structure and function of living organisms. Scientists investigate ideas and observations that solidify our understanding of the diversity of life from single cells to complex organisms. Biology has deep relations with agriculture, chemistry, psychology, and many other fields of study, and it is the foundation of our knowledge of health and disease. Courses under this category deal with the basic structure and function of organisms, the interaction of organisms with their environment, human health, biotechnology, and the concepts and mechanisms of evolution as a fundamental biological paradigm. All courses will provide some understanding of the methods of scientific inquiry and seek knowledge about the living world.

Student Learning Outcomes - Biological Science (BS)

- Learn about aspects of the living world as described in the course description.
- Demonstrate an understanding of fundamental concepts in biological science.
  - Additional Student Learning Outcomes for BS Discovery Lab (DLAB) courses
- Communicate scientific material effectively in written and oral formats.
- Summarize, analyze, and evaluate scientific data.
- Explain how scientific hypotheses are tested or rejected.
- Master appropriate laboratory and field techniques commonly used in biology.

Environment, Technology, and Society

The exponential growth of the sciences and engineering has bred an equally dramatic growth in technological advances. From the flint arrowhead to the latest communication device or weapon, human beings have been inventing things and transforming their lives, their societies, and their environments as they do. But they seldom foresee all the transformations and consequences their inventions bring about. This category stresses the interplay between at least two of these three realms: environment, technology, and society. Topics might include, but are not limited to, the history of a particular kind of technology (such as transport, fuel, writing, or weaponry), how technological change comes about in general, the scientific and/or social bases for a given technology, its impact for good or ill on human society and the natural environment, the effects of a changing environment on the arts and literature, and/or the ethical questions these topics raise.

Student Learning Outcomes - Environment, Technology, and Society (ETS)

```
One or more of the following:
```

- ```
  Explore the social consequences of technological and/or environmental change.
  ```
- ```
  Master a technology described in the course description and evaluate its human impact.
  ```
- ```
  Consider the impact of various technologies on the environment.
  ```
- Understand the way the environmental challenges shape the development of technology.

Fine and Performing Arts

The arts communicate through the intellect, the emotions, and the body, sometimes all at once, in ways simple and subtle, direct and subliminal, gentle and soul shaking. Understanding and appreciating the arts enriches our lives and preserves our cultural heritage for the future. Through its performances, publications, and exhibits, UNH offers many artistic experiences for students and the larger community, some of which are linked to courses under this category. Such courses, which may be about painting, sculpture, architecture, music, dance, theater, or film, will often include learning through practical experience.

Student Learning Outcomes - Fine and Performing Arts (FPA)

```
One or more of the following:
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- ```
  Develop an understanding and appreciation of differing forms of art expression such as music, visual art, theatre, or architecture.
  ```
- ```
  Develop skills in creative writing.
  ```
- Produce art in the studio, workshop, or theatre.

Historical Perspectives

Even though we are faced daily with evidence of change in our social world and technology, we easily forget that how we live, where we live, and what we see around us are transient states of affairs. It is important to be able to look on one's own world with an imaginative grasp of its history and the forces behind that history. Courses under this category will give students the opportunity to learn about major historical developments and how these developments have shaped contemporary life in all its complexity. Through the study of particular periods and places, students will gain both "historical perspective" and some skill at the methods of historical inquiry. Common to all courses in historical analysis is the presumption that the categories of social analysis are themselves historical and historically contingent, and that to understand the past requires entering imaginatively into languages, institutions, and worldviews quite different from those of the present day.
  ```

Student Learning Outcomes - Historical Perspectives (HP)

- Study the signature events that occurred within the time and geographical expanse specified in the course description.
- Explore the way primary sources reveal the ideas and values of people living in a different time and place.
- Appreciate human diversity through examination of class, race, and/or gender hierarchies of the past.
- Interpret the way past events and belief systems have contributed to and differed from the values and intuitions of the present.

Humanities

The humanities arose in Renaissance universities as an alternative to theology and consisted mainly of Greek and Latin literature, which dealt with any and every aspect of human life; they became central to the liberal arts. Since the nineteenth century, the humanities also have embraced modern literature, the creative arts, philosophy, and history. They focus on questions about meaning, ethics, aesthetics, and the foundations of knowledge; they are as concerned with form as with content. Courses under this category explore major works, ideas, and traditions that have shaped our understandings of the world and our sense of self at different times and places while examining the distinctive methods of humanistic inquiry.

Student Learning Outcomes - Humanities (HUMA)

- Engage with literary, philosophical, artistic and/or cinematic works that explore some aspect of the human condition.
- Pose questions about the nature of being, ethical imperatives, aesthetics, or epistemology.
- Write a critical essay investigating a focused question raised by a literary, philosophical, or artistic work.

Physical Science

The physical sciences seek to discover the components, structures, properties, and laws of the material world from subatomic particles to the entire universe. Through them, we appreciate both the wondrous complexity of the world and its order. The traditional domains of chemistry, physics, astronomy, cosmology, and Earth sciences are the foundations of knowledge in numberless arenas of human activity, while the intersections between these domains and the biological sciences yield astonishing discoveries about living organisms. All courses will provide some understanding of the methods of scientific inquiry, seek knowledge about the physical universe, and evaluate claims in both technical literature and popular media.

Student Learning Outcomes - Physical Science

- Learn about aspects of the physical world specified in the course description.
- Demonstrate an understanding of fundamental concepts in the physical sciences.
- Use mathematical models and computational thinking to understand the physical world.
- Additional Student Learning Outcomes for PS DLAB courses
- Communicate scientific information effectively in written and oral formats.
- Summarize, analyze, and evaluate scientific data.
- Explain how hypotheses are tested or rejected.
- Master appropriate laboratory and field techniques commonly used in physical science.

Social Science

The social sciences investigate human beings and their societies from the smallest bands of hunter gatherers to huge nations and global institutions. Everything from marriage and kinship to law and crime, from ceremonial gift giving to mortgage derivatives, from witchcraft to health insurance, from ancient ritual to modern communication, is a subject of a social science. Courses under this category will explore different theories, methods, and data-gathering techniques as they apply to different social issues. They also will examine how individuals create, interact with, and are shaped by social groups and institutions, including those associated with politics, economics, religion, family, the arts, health, and education.

Student Learning Outcomes - Social Science (SS)

- Apply quantitative and/or qualitative data to investigate the dynamics of social interactions.
- Develop testable hypotheses regarding the social and cultural world they examine.

World Cultures

Living in a world of many cultures has created both cooperation and conflict across borders, between and within nations. This category, which includes intermediate language courses and approved study abroad programs, encourages students to become cosmopolitan citizens by gaining knowledge and understanding of cultures other than those of the United States. Students will learn to recognize others' values and, ultimately, accept the many ways in which we all are human. They are thus encouraged to see their own culture with fresh eyes and know the sheer diversity of human outlooks.

Student Learning Outcomes - World Cultures (WC)

- Explore human diversity by studying societies and cultures outside the United States.
- Recognize the diversity and validity of unfamiliar cultural values.

Discovery Lab (DLAB)

A course that fulfills the laboratory requirement in the Discovery Program should provide students with hands-on experience that reinforces, supports, and/or augments the material presented in other formats throughout the course. It should teach them how the discipline uncovers and validates knowledge; how phenomena are understood through observation, experimentation, and quantitative analysis; how data are collected and interpreted; and how hypotheses are created, tested, modified, confirmed, or invalidated. These experiences also are likely to provide insights into how scientific theories and models are constructed.

A significant portion of specified course time must be devoted to laboratory and laboratory-related activities. For example, a conventional model for a 4-credit laboratory course consists of three 50-minute (or two 75-minute) weekly lecture periods plus one 80-minute weekly laboratory period. However, courses may include different and/or innovative laboratory experiences provided the total amount of course and laboratory time is comparable.

Student Learning Outcomes - Discovery Lab (DLAB)

- Explain phenomena through observation, experimentation, and quantitative analysis.
- Collect and interpret data.
- Create, test, modify, confirm or invalidate hypotheses.
- Master appropriate laboratory and field techniques used in the biological and physical sciences.
- Communicate scientific material effectively in written and oral formats.

Master List - Discovery Program Approved Courses

Biological Science (BS)

Physical Science (PS)

Discovery Lab (DLAB)

Environment, Technology, and Society (ETS)

Fine and Performing Arts (FPA)

Historical Perspectives (HP)

Humanities (HUMA)

Inquiry

Quantitative Reasoning

Social Science (SS)

World Cultures (WC)

Writing Skills

Biological Science (BS)

Code	Title	Credits
AGFS 415	The Science of Fermentation: A Culinary Journey from Bread to Beer	4
AGFS 421	Introductory Horticulture	0,4
ANSC 401	Animals and Society	0,4
ANTH 415	The Human Story: Evolution, Fossils and DNA	4
ANTH 550	Introduction to Forensic Anthropology	4
BIOL 402	Biology in our Daily Lives	4
BIOL 408	Plants and Civilization	4
BIOL 409	Green Life: Introducing the Botanical Sciences	0,4
BIOL 411	Introductory Biology: Molecular and Cellular	0,4
BIOL 411H	Honors/Introductory Biology: Molecular and Cellular	0,4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	0,4
BIOL 412H	Honors/Introductory Biology: Evolution, Biodiversity, and Ecology	0,4
BIOL 413	Principles of Biology I	0,4
BIOL 414	Principles of Biology II	0,4
BIOL 420	Introduction to Forensic Sciences	0,4
BIOL 430	Biology of the City	4
BIOL 444B	Current Controversial Issues in Biology	4
BMS 407	Germs 101	4
BMS 501	Microbes in Human Disease	0,4
BMS 507	Human Anatomy and Physiology I	0,4
BMS 508	Human Anatomy and Physiology II	0,4
BSCI 401	The Secret Lives of Whales	4
BSCI 410	Contemporary Health Issues	4
BSCI 450	The Small Microbial World	0,4
CHEM 740	Chemical Biology	3
EXSC 527	Scientific Foundations of Health and Fitness	4
EXSC 607	Biology of Aging	4
HMP 501	Epidemiology and Community Medicine	0,4
KIN 505	Activity, Injuries and Disease	4
NR 433	Wildlife Ecology	4
NUTR 400	Nutrition in Health and Well Being	0,4
OT 513	Stressed Out: The Science and Nature of Human Stress	0,4
PSYC 440A	Honors/Understanding the Human Brain	4
SCI 490	Human Biology	4
SCI 502	Nutrition and Health	4
SCI 508	Issues in Women's Health	4
SCI 550	Wellness and the Human Body	4
SCI 575	Introduction to Lifestyle Medicine	4
SCI 604	Principles of Exercise Science	4
VTEC 435	Animal Health and Laboratory Diagnostics	4
ZOOL 401	Human Biology	0,4

Physical Science (PS)

Code	Title	Credits
CHBE 410	Energy and Environment	4
CHEM 403	General Chemistry I	0,4
CHEM 404	General Chemistry II	0,4
CHEM 404H	Honors/General Chemistry II	0,4
CHEM 405	Chemical Principles for Engineers	0,4
CHEM 408	Green Goggles: Introduction to Green Chemistry	4
CHEM 409	Chemistry and Society	4
CHEM 411	Introductory Chemistry for Life Sciences	0,4
ESCI 401	Dynamic Earth	4
ESCI 402	Earth History	4
ESCI 405	Global Environmental Change	4
ESCI 409	Geology and the Environment	4
ESCI 410	Earth Hazards	4
ESCI 420	Our Solar System	4
ESCI 451	Earth in Film	4
ESCI 501	Introduction to Oceanography	4
ESCI 502	Beaches and Coasts	4
GEOG 473	Elements of Weather	4
GEOG 572	Geography of the Natural Environment	4
GEOG 574	Global Landscapes and Environmental Processes	4
MS 401	Science of Stuff	4
NR 504	Freshwater Resources	4
PHYS 401	Introduction to Physics I	0,4
PHYS 402	Introduction to Physics II	0,4
PHYS 405	Intro to Modern Astronomy	4
PHYS 406	Introduction to Modern Astronomy	0,4
PHYS 407	General Physics I	0,4
PHYS 407H	Honors/General Physics I	0,4
PHYS 407S	General Physics I Studio	4
PHYS 408	General Physics II	0,4
PHYS 408H	Honors/General Physics II	0,4
PHYS 408S	General Physics II Studio	4
PHYS 409	Investigating Physics	4
PHYS 440A	Hon/Searching for Our Place in the Universe: Foundation and Limits of Certainty in Physical Science	4
SCI 412	Introduction to Astronomy	4
SCI 470	Physical Geography	4

SCI 480	Introduction to Oceanography	4
SCI 541	Introduction to Environmental Science	4

Discovery Lab (DLAB)

Code	Title	Credits
AGFS 421	Introductory Horticulture	0,4
ANSC 401	Animals and Society	0,4
BIOL 408	Plants and Civilization	4
BIOL 409	Green Life: Introducing the Botanical Sciences	0,4
BIOL 411	Introductory Biology: Molecular and Cellular	0,4
BIOL 411H	Honors/Introductory Biology: Molecular and Cellular	0,4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	0,4
BIOL 412H	Honors/Introductory Biology: Evolution, Biodiversity, and Ecology	0,4
BIOL 413	Principles of Biology I	0,4
BIOL 414	Principles of Biology II	0,4
BIOL 420	Introduction to Forensic Sciences	0,4
BIOL 430	Biology of the City	4
BMS 501	Microbes in Human Disease	0,4
BMS 507	Human Anatomy and Physiology I	0,4
BMS 508	Human Anatomy and Physiology II	0,4
BSCI 450	The Small Microbial World	0,4
CHEM 403	General Chemistry I	0,4
CHEM 404	General Chemistry II	0,4
CHEM 404H	Honors/General Chemistry II	0,4
CHEM 405	Chemical Principles for Engineers	0,4
CHEM 411	Introductory Chemistry for Life Sciences	0,4
ESCI 401	Dynamic Earth	4
ESCI 402	Earth History	4
ESCI 409	Geology and the Environment	4
ESCI 410	Earth Hazards	4
ESCI 420	Our Solar System	4
ESCI 501	Introduction to Oceanography	4
EXSC 527	Scientific Foundations of Health and Fitness	4
GEOG 473	Elements of Weather	4
HMP 501	Epidemiology and Community Medicine	0,4
NR 433	Wildlife Ecology	4
NR 504	Freshwater Resources	4
NUTR 400	Nutrition in Health and Well Being	0,4
OT 513	Stressed Out: The Science and Nature of Human Stress	0,4
PHYS 401	Introduction to Physics I	0,4
PHYS 402	Introduction to Physics II	0,4
PHYS 406	Introduction to Modern Astronomy	0,4
PHYS 407	General Physics I	0,4
PHYS 407H	Honors/General Physics I	0,4
PHYS 407S	General Physics I Studio	4
PHYS 408	General Physics II	0,4
PHYS 408H	Honors/General Physics II	0,4
PHYS 408S	General Physics II Studio	4
PHYS 409	Investigating Physics	4
VTEC 435	Animal Health and Laboratory Diagnostics	4
ZOOL 401	Human Biology	0,4

Environment, Technology, and Society (ETS)

Code	Title	Credits
AGFS 405	Sustainable Agriculture and Food Production	4
ANTH 440A	Medicine and Culture: Science, Technology and the Body	4
ANTH 530	Multispecies Planet: Animals, Plants, and Landscapes Across Cultures	4
ART 515	Digital Photography	4
ARTH 440A	From Digging to Digital: Preserving and Displaying the Past	4
ARTS 552	Introductory Digital Photography	4
BIOL 520	Our Changing Planet	4
BIOT 510	Introduction to Biofabrication	4
BMS 650	Molecular Diagnostics	4
CEE 400	Introduction to Civil and Environmental Engineering	0,4
CEE 520	Environmental Pollution and Protection: A Global Context	0,4
CLAS 540A	Environment, Technology and Ancient Society: Sustaining Ancient Rome Ecology and Empire	4
CLAS 540B	Environment, Technology and Ancient Society: Roman Houses, Domestic Space and Public Life	4
CLAS 540C	Environment, Technology and Ancient Society: Tech, Tools and Engineering in the Ancient World	4
CMN 529	Data for Sale: Capitalism and the Surveillance Economy	4
CMPL 525	Foundations of Cybersecurity	4
CMPL 622	Human Computer Interaction	4
COMP 405	Introduction to Web Design and Development	4
COMP 415	Mobile Computing First and For Most	4
CS 408	Living in a Networked World: The Good, the Bad, and the Ugly	4
CS 450	AI and the World	4
CS 457	Introduction to Data Science and Analytics	4
CS 501	Professional Ethics and Communication in Technology-related Fields	4
DATA 557	Introduction to Data Science and Analytics	4
DS 444	Meaning of Entrepreneurship	4
ECOG 401	Introduction to Ecogastronomy	0,4
ENG 545	The Media and Its Messages	4
ENGL 534	21st Century Journalism: How the News Works	4
ESCI 444A	Philosophy of Earth Science	4
ET 401	Introduction to 3D Printing	4
GEOG 405	There Is No Planet B	4
GEOG 560	Natural Hazards and Human Disasters	4
HLS 580	Environmental and Human Security	4
HMP 512	Using Data to Improve Human Health	4
JUST 405	Technology, Crime, and Society: A Forensic Exploration of High-Tech and Digital Crime	4
MATH 445	Mathematics and Applications with MATLAB	4
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
NR 435H	Honors/Contemporary Conservation Issues and Environmental Awareness	4
NR 507	Introduction to our Energy System and Sustainable Energy	4
NURS 450	Making Babies: Technology, Nature, and Social Context	4
OT 444	Living and Doing with Technology	4
PHIL 424	The Future of Humanity: Science, Technology, and Society	4
PHIL 424H	Honors/The Future of Humanity: Science, Technology, and Society	4
PHIL 435	Human Nature and Evolution	4
PHIL 447	A.I., Robots, and People	4
PHIL 450	Environmental Ethics	4
POLT 444	Politics and Policy in a Warming World	4
SCI 610	Contemporary Issues in Personal and Global Health	4
SOC 444A	Honors/Society in the Arctic	4
SOC 565	Environment and Society	4
SUST 401	Exploring Sustainability	4
SUST 401H	Honors/Exploring Sustainability	4

Fine and Performing Arts (FPA)

Code	Title	Credits
AMST 444C	Picturing America: The Arts & Social Change	4
ART 401	Introduction to Drawing	4
ART 403	Introduction to Watercolor	4
ART 512	Fundamentals of Design	4
ART 550	Art History: Western World	4
ARTH 400	Topics in Art History	4
ARTH 444	Mona Lisa to Much Ado About Nothing: An Introduction to Renaissance Culture	4
ARTH 444B	Art and Money	4
ARTH 480	Introduction to Art History	4
ARTH 485	Introduction to Global Art History	4
ARTS 510	Principles of Design	4
ARTS 525	Introductory Woodworking	4
ARTS 532	Introductory Drawing	4
ARTS 532H	Honors/Introductory Drawing	4
ARTS 567	Introductory Sculpture	4
BSCI 441	Exploring NH Forests: Drawing to Discover the Tree Community	4
CA 502	Image and Sound	4
CLAS 510	Building Rome	4
ENG 604	Creative Writing	4
ENGL 501	Introduction to Creative Nonfiction	4
ENGL 526	Introduction to Fiction Writing	4
ENGL 527	Introduction to Poetry Writing	4

HIST 440F	Honors/Islam, Art, and the Past	4
HIST 444H	Honors/From Beijing to Baghdad: Objects along the Silk Road	4
HUMA 510A	Ancient Humanities: Cultures and Empires	4
HUMA 511A	Medieval Humanities: Rise of Global Empires	4
HUMA 512A	Modern Humanities: Colonies, Constitutions, and Capital	4
HUMA 514A	Space, Place, & the Environment	4
HUMA 551	Budapest Spring Semester: Field Studies in Art and Culture	6
ITAL 525	Italian Cinema	4
ITAL 526	The Art of Cinema in Italy	4
LLC 555	Discover Cuba: An Arts Experience	4
MUSI 401	Introduction to Music	4
MUSI 403	Roots of Rock	4
MUSI 404	An Introduction to Music, Media, and the Moving Image	4
MUSI 405	Survey of Music in America	4
MUSI 406	Country Music	4
MUSI 444	Music and Social Change	4
PHIL 421	Philosophy and the Arts	4
THDA 435	Introduction to Theatre	4
THDA 436	History of Theatre I	4
THDA 438	History of Theatre II	4
THDA 439	In Bed with the Bard: Shakespearean Seduction from Romeo and Juliet to Leonardo and Claire	4
THDA 441	Exploring Musical Theatre	4
THDA 442	Introduction to the Art of Acting	4
THDA 444B	Famous Dancers of the 20th Century	4
THDA 459	Stagecraft	0,4
THDA 462	Ballet I	4
THDA 463	Theatre Dance I	4
THDA 487	History of Dance	4
THDA 522	Storytelling, Story Theatre, and Involvement Dramatics	4
THDA 531	The London Experience: Discovery	4
THDA 548	Stage Lighting Design and Execution	4
THDA 583	Introduction to Puppetry	4

Code	Title	Credits
The music courses listed below may also satisfy the Discovery Fine and Performing Arts (FPA) requirement if taken for a minimum of three semesters and a minimum of three credits total are earned.		
MUSI 441	Concert Choir	1
MUSI 442	Chamber Singers	1
MUSI 448	Vocal Arts Project	1
MUSI 450	Symphony	1
MUSI 452	Wind Symphony	1
MUSI 453	Symphonic Band	1
MUSI 454	UNH Marching Band	1
MUSI 460	Jazz Band	1

Historical Perspectives (HP)

Code	Title	Credits
ARTH 474	Introduction to Architectural History	4
BUS 492	American Business History	4
CA 527	History of Film	4
CLAS 403	Introduction to Greek Civilization	4
CLAS 404	Introduction to Roman Civilization	4
CLAS 444D	Athens, Rome, and the Birth of the United States	4
CLAS 511	Special Studies in Greek History	4
CLAS 520A	Classical Society, Politics and Ethics: Democracies and Republics	4
CLAS 520B	Classical Society, Politics and Ethics: Happiness and Ancient Views of the Good Life	4
CLAS 520C	Classical Society, Politics and Ethics: Sports, Spectacle and Competition	4
CLAS 520D	Classical Society, Politics and Ethics: Greek and Roman Religion	4
CLAS 550A	Identities and Difference in the Ancient World: Greek and Roman Women	4
CLAS 550B	Identities and Difference in the Ancient World: Slaves and Masters	4
CLAS 550C	Identities and Difference in the Ancient World: Sex and Desire in Greece and Rome	4
ECON 501	Business and Economic History	4
HIS 402	Great Civilizations	4
HIS 410	United States History to 1865	4
HIS 411	United States History: 1865 to the Present	4
HIS 611	Themes in World History	4
HIS 718	History of World War II	4
HIST 403	Introduction to Greek Civilization	4
HIST 404	Introduction to Roman Civilization	4
HIST 405	History of Early America	4
HIST 405W	History of Early America	4
HIST 406	History of the Modern United States	4
HIST 410	Historic Survey of American Civilization	4
HIST 421	World History to the 16th Century	4
HIST 422	World History in the Modern Era	4
HIST 436	Europe and the Modern World	4
HIST 436W	Europe and the Modern World	4
HIST 437H	Honors/The Mad Among Us: A Global History of Mental Disorder	4
HIST 440A	Martin Luther King, Jr., and the Struggle for Racial Justice	4
HIST 440D	Honors/Citizens and Persons	4
HIST 440J	Capitalism and Inequality in World History	4
HIST 444J	Honors/Global Citizenship: In Pursuit of Liberty	4
HIST 483	History of World Religions	4
HIST 497	Explorations in Historical Perspectives	4
HIST 498	Explorations of Historical Perspectives	4
HIST 505	African American History	4
HIST 509	Law in American Life	4
HIST 511	History of New Hampshire	4
HIST 520	History of Animals	4
HIST 522	Science in the Modern World	4
HIST 532	Modern Latin America	4
HIST 547	Introduction to Russian History: Russia and the World	4
HIST 555	The Vikings!	4
HIST 565	Women in Modern Europe	4
HIST 585	Medieval Islam	4
HUMA 440H	Honors/Changing Our Minds: Revolutions in Thought	4
HUMA 510C	Ancient Humanities: Cultures and Empires	4
HUMA 511C	Medieval Humanities: Rise of Global Empires	4
HUMA 512C	Modern Humanities: Colonies, Constitutions, and Capital	4
HUMA 513C	Global Humanities	4
HUMA 514C	Space, Place, & the Environment	4
HUMA 525	Humanities and the Law	4
HUMA 547	Introduction to Russian History: Russia and the World	4
ITAL 681A	Ancient and Medieval Italy	4
LLC 540	Film History	4
NUTR 535	History of Food in Italy	4
OUT 515	History of Outdoor Pursuits in North America	4
POL 690	The US in World Affairs	4
POLT 403	United States in World Affairs	4
PS 402	Practical Politics	4
PSYC 571	Pioneers of Psychology	4
RMP 515	History of Outdoor Pursuits in North America	4
RS 483	History of World Religions	4
RUSS 525	Russia: Mythology and Propaganda	4
SML 561	History of American Sport and Physical Culture	4
SML 561W	History of American Sport and Physical Culture	4
SW 525	Social Welfare Policy: History of Social and Economic Justice	4
WGS 444A	Race Matters	4
WGS 505	Survey in Women's Studies	4
WGS 510	Framing Feminism: Gender Politics in Film	4

Humanities (HUMA)

Code	Title	Credits
AMST 444D	Long-Ago Stories Behind Everyday Life	4
ANSC 419	Horse Power	4
CLAS 401	Classical Mythology	4
CLAS 444	Individual and Society in the Ancient World	4
CLAS 530A	Classical Literary Performance Genres: War and Adventure in Ancient Epic	4
CLAS 530B	Classical Literary and Performance Genres: Tragedy and Comedy on the Ancient Stage	4
CMN 456	Propaganda and Persuasion	4
COMP 560	Ethics and the Law in the Digital Age	4
ECN 410	History of Literary Economics	4
ENG 450	Introduction to Literature	4

ENG 555	Children's Literature	4
ENG 565	Modern American Writers 1865 to the Present	4
ENG 615	Young Adult Literature	4
ENG 620	Multicultural Perspectives through Literature	4
ENGL 415C	Literature and Medicine	4
ENGL 440A	Honors/On Race in Culture and Society	4
ENGL 440B	Honors/Seeing is Believing: How the Copernican Revolution Changed the Way We See Ourselves	4
ENGL 444D	The Irish Experience	4
ENGL 444N	Monsters!!!	4
ENGL 512	British Literature I Age of Heroes: Beowulf to Dr. Faustus	4
ENGL 513W	British Literature II Age of Revolutions: Shakespeare to Austen	4
ENGL 514	British Literature III: Revolts, Renewals, Migrations	4
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	4
ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	4
ENGL 518W	Bible as Literature	4
ENGL 520	Dystopian and Post-Apocalyptic Fiction	4
ENGL 533	Introduction to Film Studies	4
ENGL 550	Introduction to the Literature and Culture of Race	4
ENGL 555	Science Fiction	4
ENGL 560	Introduction to Latinx Literature and Culture	4
ENGL 565	Literary Dublin: Short-Term Study Abroad	4
ENGL 575	Sex and Sensibility: The Rise of Chick Lit	4
FREN 651	Love, War, and Power in French Literature	4
FREN 652	Greatest Hits of French	4
HIST 525	Explorations in History & Humanities	4
HUMA 401	Introduction to the Humanities	4
HUMA 401W	Introduction to Humanities	4
HUMA 411	Humanities I	4
HUMA 412	Humanities II	4
HUMA 440A	Honors/Hooked: Narratives of Addiction, Recovery, and Redemption	4
HUMA 440B	Honors/That Belongs in a Museum! Museums and the Ownership of Antiquities	4
HUMA 444E	What is a Criminal?	4
HUMA 500	Critical Methods in the Humanities	4
HUMA 505	Introduction to Religion	4
HUMA 512D	Modern Humanities: Colonies, Constitutions, and Capital	4
HUMA 513D	Global Humanities	4
HUMA 519	Classical Greece	4
HUMA 526	Humanities and Science	4
HUMA 550	Budapest Spring Semester: Special Studies in Comparative Ideas	4
HUMN 480	Introduction to Ethics	4
HUMN 502	American Popular Culture	4
ITAL 444A	Italians Come to America: Representing Emigration and Immigration on Both Sides of the Atlantic	4
ITAL 444B	Mamma Mia! Italian Motherhood from the Virgin Mary to Carmela Soprano	4
ITAL 522	Modern and Contemporary Italian Culture	4
ITAL 552	Race, Gender and Identity in the Renaissance	4
ITAL 553	Containing Difference: Race and Identity in Contemporary Italy	4
ITAL 635	Italian Food Studies	4
ITAL 681B	Ancient and Medieval Italy	4
ITAL 682B	Italian Culture: Early Modern, Modern and Contemporary	4
LLC 444I	US Latinx Cities: Urban Culture, Society and Space	4
LLC 552	Comparative Literature: Masterpieces of World Literature II	4
LLC 560	Divine Madness and Dangerous Minds! - Mental Health in Literature and Art	4
NUTR 530	Critical Analysis in Food Studies	4
PHIL 401	Introduction to Philosophy	4
PHIL 405	Critical Thinking	4
PHIL 410	Happiness, Well-Being , and a Good Life	4
PHIL 417	God, Religion, and the Meaning of Life	4
PHIL 419	Race, Gender and Social Justice	4
PHIL 420	Introduction to Philosophy of Law and Justice	4
PHIL 430	Ethics and Society	4
PHIL 430W	Ethics and Society	4
PHIL 431	Business Ethics	4
PHIL 436	Social and Political Philosophy	4
PHIL 436H	Honors/Social and Political Philosophy	4
PHIL 436W	Social and Political Philosophy	4
PHIL 440A	Honors/Who Are You? Personal Identity and Humanity	4
PHIL 440B	Honors/Who's Human Now?	4
PHIL 510	Philosophy and Feminism	4
PHIL 525	Existentialism	4
PHIL 531	Topics in Professional and Business Ethics	4
PHIL 570	Ancient Philosophy	4
POLT 401	Politics and Society	4
POLT 524	Politics and Literature	4
RMP 511	Issues of Wilderness and Nature in American Society	4
RS 505	Introduction to Religion	4
RUSS 521W	Devils, Deities, and Madness in Russian Literature	4
SPAN 654	Introduction to Latin American Literature and Thought	4
WGS 405	Gender, Power and Privilege	4

Inquiry

Code	Title	Credits
ADMN 575	Behavior in Organizations	4
AMST 444C	Picturing America: The Arts & Social Change	4
AMST 444D	Long-Ago Stories Behind Everyday Life	4
ANTH 513	Ethnographic Methods	4
ANTH 514	Method and Theory in Archaeology	0,4
ARTH 444	Mona Lisa to Much Ado About Nothing: An Introduction to Renaissance Culture	4
ARTH 444B	Art and Money	4
ARTS 598	An Artist's Life	4
BIOL 411	Introductory Biology: Molecular and Cellular	0,4
BIOL 411H	Honors/Introductory Biology: Molecular and Cellular	0,4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	0,4
BIOL 412H	Honors/Introductory Biology: Evolution, Biodiversity, and Ecology	0,4
BIOL 413	Principles of Biology I	0,4
BIOL 444B	Current Controversial Issues in Biology	4
CEE 400	Introduction to Civil and Environmental Engineering	0,4
CHBE 502	Energy Balances	3
CHEM 409	Chemistry and Society	4
CHEM 574	Chemistry Across the Periodic Table	4
CLAS 444	Individual and Society in the Ancient World	4
CLAS 444D	Athens, Rome, and the Birth of the United States	4
CLAS 511	Special Studies in Greek History	4
CMN 504	Introduction to Argumentation	4
CMN 505	Analysis of Popular Culture	4
CMN 507	Introduction to Rhetorical Theory and Analysis	4
CMN 576	Introduction to Civil Discourse	4
CMN 585H	Honors/Civil Discourse for Complex Problems	4
CMN 588	Analyzing Institutional Interaction	4
CRIT 501	Introduction to Critical Inquiry	4
CS 501	Professional Ethics and Communication in Technology-related Fields	4
DS 444	Meaning of Entrepreneurship	4
ECE 401	Perspectives in Electrical and Computer Engineering	4
ECN 410	History of Literary Economics	4
ECON 401H	Honors/Principles of Economics (Macro)	4
ECON 402H	Honors/Principles of Economics (Micro)	4
ECON 501	Business and Economic History	4
ENGL 405	Introduction to Linguistics	4
ENGL 419	How to Read Anything	4
ENGL 444D	The Irish Experience	4
ENGL 444N	Monsters!!!	4
ENGL 550	Introduction to the Literature and Culture of Race	4
ENGL 560	Introduction to Latinx Literature and Culture	4
ESCI 444A	Philosophy of Earth Science	4
ESCI 501	Introduction to Oceanography	4
ET 405	Engineering Design	4
FREN 525	A Road Trip Through France: Baguette, Brie, Bordeaux, and Beyond	4
GEOG 581	Society, Environment and Justice	4
GERM 525	Introduction to German Culture and Civilization	4
HIST 444H	Honors/From Beijing to Baghdad: Objects along the Silk Road	4
HIST 444J	Honors/Global Citizenship: In Pursuit of Liberty	4
HIST 500	Introduction to Historical Thinking	4
HMGT 570	International Food and Culture	0,4
HUMA 411	Humanities I	4
HUMA 412	Humanities II	4

HUMA 444E	What is a Criminal?	4
HUMA 444F	Travelers in the Premodern World	4
HUMA 500	Critical Methods in the Humanities	4
IDIS 560	Research Methods in the Behavioral Sciences	4
ITAL 444A	Italians Come to America: Representing Emigration and Immigration on Both Sides of the Atlantic	4
ITAL 444B	Mamma Mia! Italian Motherhood from the Virgin Mary to Carmela Soprano	4
ITAL 522	Modern and Contemporary Italian Culture	4
ITAL 553	Containing Difference: Race and Identity in Contemporary Italy	4
JUST 501	Research Methods	4
LING 405	Introduction to Linguistics	4
LLC 444I	US Latinx Cities: Urban Culture, Society and Space	4
LLC 525	Topics in World Cultures	4
LLC 560	Divine Madness and Dangerous Minds! - Mental Health in Literature and Art	4
MATH 444	Excursions in Quantitative Reasoning	4
ME 441	Introduction to Engineering Design and Solid Modeling	0,4
MUSI 444	Music and Social Change	4
MUSI 502	Musics in Context	3
NR 403	Introduction to Environmental Science	4
NR 444	The New Pirates of the Caribbean	4
NURS 535	Death and Dying	4
OT 444	Living and Doing with Technology	4
OT 520	Happy and Healthy at Work: Promoting Wellness, Diversity and Inclusion	4
OUT 444A	Risk and the Human Experience	4
PHIL 405	Critical Thinking	4
PHIL 410	Happiness, Well-Being , and a Good Life	4
PHIL 419	Race, Gender and Social Justice	4
PHIL 421	Philosophy and the Arts	4
PHIL 436	Social and Political Philosophy	4
PHIL 436H	Honors/Social and Political Philosophy	4
PHIL 436W	Social and Political Philosophy	4
PHIL 525	Existentialism	4
PHIL 560	Philosophy Through Fiction	4
PHYS 409	Investigating Physics	4
POLT 444	Politics and Policy in a Warming World	4
POLT 444B	Cruel and Unusual in a Federal System	4
POLT 595	Smart Politics	4
PS 515	New Hampshire Politics in Action	4
PS 595	Research for Political and Policy Action	4
PSYC 502	Research Methods in Psychology	4
RMP 444A	Taking the "Dis" out of Disability	4
RUSS 521W	Devils, Deities, and Madness in Russian Literature	4
SOC 444A	Honors/Society in the Arctic	4
SOC 599	Sociological Analysis	4
SW 501	Research Methods in Social Work	4
TECH 412	Innovation Scholars II	2
THDA 444B	Famous Dancers of the 20th Century	4
THDA 541	Arts Administration and Entrepreneurship	4
THDA 551	Acting I	4
WGS 401W	Introduction to Women's Studies	4
WGS 444A	Race Matters	4
WGS 505	Survey in Women's Studies	4

Quantitative Reasoning

Code	Title	Credits
ADMN 510	Business Analytics and Statistics	4
BIOL 428	Quantitative Biosciences	4
BIOL 528	Applied Biostatistics I	4
BUS 430	Introduction to Business Statistics	0,4
BUS 530	Personal Finance	4
HMP 540	Statistics for Health and Human Service Professionals	4
MATH 418	Analysis and Applications of Functions	0,4
MATH 420	Finite Mathematics	0,4
MATH 421	Pathways between Mathematics and the Arts	4
MATH 422	Mathematics for Business Applications	0,4
MATH 424A	Calculus for Social Sciences	4
MATH 424B	Calculus for Life Sciences	0,4
MATH 425	Calculus I	0,4
MATH 425H	Honors/Calculus I	4
MATH 439	Statistical Discovery for Everyone	4
MATH 444	Excursions in Quantitative Reasoning	4
MTH 402	Math for Our World	4
MTH 504	Statistics	4
MTH 510	Pre-Calculus	4
PAUL 450	Personal Finance	4
PHIL 412	Beginning Logic	4
PSYC 402	Statistics in Psychology	4
SOC 402	Statistics	4

Social Science (SS)

Code	Title	Credits
ANTH 412	Broken Pots and Buried Cities: Introduction to World Archaeology	4
ANTH 525	Anthropology of the Body: Fat, Fitness and Form	4
CEP 415	Community Development Perspectives	4
CMN 440A	Honors/The Language of Addiction: Stigma, Social Relations, and Drug Use	4
CMN 455	Introduction to Media Studies	4
CMN 457	Introduction to Language and Social Interaction	4
CMN 576	Introduction to Civil Discourse	4
CMN 585H	Honors/Civil Discourse for Complex Problems	4
CRIM 425	Juvenile Justice	4
ECN 411	Introduction to Macroeconomic Principles	4
ECN 411W	Introduction to Macroeconomic Principles	4
ECN 412	Introduction to Microeconomic Principles	4
ECN 412W	Introduction to Microeconomic Principles	4
ECON 401	Principles of Economics (Macro)	0,4
ECON 401H	Honors/Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
ECON 402H	Honors/Principles of Economics (Micro)	4
EDUC 520	Education, Poverty, and Development	4
ENGL 405	Introduction to Linguistics	4
GEOG 580	Human Geography: People and Places	4
GEOG 581	Society, Environment and Justice	4
GEOG 582	Global Trade and Local Development	4
HDFS 525	Human Development	0,4
HDFS 545	Intimate Relationships and Families	4
HLS 505	Political Violence and Terrorism	4
HMP 401	United States Health Care Systems	4
IDIS 560	Research Methods in the Behavioral Sciences	4
INCO 505B	Social Innovator's Toolbox	4
INTR 438	A Socio-cultural Perspective on the Deaf Community	4
LING 405	Introduction to Linguistics	4
NR 411	Environmental and Resource Economics Perspectives	4
NURS 535	Death and Dying	4
NUTR 405	Food and Society	4
OT 520	Happy and Healthy at Work: Promoting Wellness, Diversity and Inclusion	4
OUT 444A	Risk and the Human Experience	4
POLT 402	American Politics and Government	4
POLT 444B	Cruel and Unusual in a Federal System	4
POLT 512	Public Opinion in American Politics	4
POLT 560	World Politics	4
PS 500	Wicked Problems: Puzzles in Public Policy	4
PSY 410	Introduction to Psychology	4
PSY 525	Human Development	4
PSY 530	Social Psychology	4
PSYC 401	Introduction to Psychology	4
RMP 444A	Taking the "Dis" out of Disability	4
RMP 490	Recreation & Tourism in Society	4
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4
SOC 400	Introductory Sociology	4
SOC 450	Contemporary Social Problems	4
SOC 530	Sociology of Race and Ethnicity	4
SOCI 410	Introduction to Sociology	4
SW 440A	Honors/Healthy Communities: Environmental Justice and Social Change	4
SW 501	Research Methods in Social Work	4
SW 550	Human Behavior and Social Environment I	4

SW 551	Human Behavior and Social Environment II	4
WGS 401W	Introduction to Women's Studies	4

World Cultures (WC)

Code	Title	Credits
AGFS 410	A Taste of the Tropics	4
ANSC 690	Livestock and Wildlife in Namibia: Challenges, Opportunities and Geography	4
ANTH 411	Global Perspectives on the Human Condition: An Introduction to Anthropology	4
ANTH 411W	Global Perspectives on the Human Condition: An Introduction to Anthropology	4
ANTH 500	Peoples and Cultures of the World	4
ANTH 501	World Archaeological Cultures	4
ANTH 527	Humanities and Religion	4
ARBC 425	Introduction to Arabic Culture	4
ARBC 503	Intermediate Arabic	4
ARBC 504	Intermediate Arabic	4
ARTH 501	Introduction to Mediterranean Archaeology	4
ARTH 502	Ancient Pompeii and the Bay of Naples	4
CHIN 425	Introduction to Chinese Culture	4
CHIN 503	Intermediate Chinese I	4
CHIN 504	Intermediate Chinese II	4
CLAS 501	Introduction to Mediterranean Archaeology	4
CLAS 502	Ancient Pompeii and the Bay of Naples	4
CLAS 551	Race, Ethnicity, Class & Classics	4
COLA 655	London Program	0-18
COLA 658	Humanities Spring Budapest Program	0-16
ENGL 581	Reading the Postcolonial Experience	4
FREN 503	Intermediate French I	4
FREN 503W	Intermediate French I	4
FREN 504	Intermediate French II	4
FREN 525	A Road Trip Through France: Baguette, Brie, Bordeaux, and Beyond	4
FREN 631	Advanced French: Reading and Writing	4
FREN 632	Advanced French: Listening and Speaking	4
FREN 690	Study Abroad in Dijon France	0-16
GEOG 401	World Regions: Europe and the Americas	4
GEOG 402	World Regions: Asia and Africa	4
GEOG 530	China: People, Politics and Economy	4
GEOG 550	Sub-Saharan Africa: Environmental Politics and Development	4
GERM 503	Intermediate German I	4
GERM 504	Intermediate German II	4
GERM 525	Introduction to German Culture and Civilization	4
GREK 503	Intermediate Classical Greek I	4
GREK 504	Intermediate Classical Greek II	4
HIST 425	Foreign Cultures	4
HIST 440E	Honors/Drugs and Addiction in World History	4
HIST 563	Introduction to Russian Culture and Civilization	4
HIST 566	Comparative Revolutions: How to Make a Revolution in the World before Marx	4
HIST 571	Modern Middle East History	4
HLS 555	Comparative Homeland Security Systems	4
HMGT 570	International Food and Culture	0,4
HUMA 444F	Travelers in the Premodern World	4
HUMA 510B	Ancient Humanities: Cultures and Empires	4
HUMA 511B	Medieval Humanities: Rise of Global Empires	4
HUMA 512B	Modern Humanities: Colonies, Constitutions, and Capital	4
HUMA 513B	Global Humanities	4
HUMA 514B	Space, Place, & the Environment	4
HUMA 527	Humanities and Religion	4
HUMA 563	Introduction to Russian Culture and Civilization	4
HUMA 571	Modern Middle East History	4
IA 401	Foundations of International and Global Studies	4
INCO 585	Foreign Exchange	0-16
INCO 586	Foreign Exchange	0-16
INCO 685	Study Abroad	0-16
INCO 686	Study Abroad	0-16
ITAL 425	Introduction to Italian Studies	4
ITAL 503	Intermediate Italian I	4
ITAL 504	Intermediate Italian II	4
ITAL 510J	Rome: The Eternal City in Italian Culture	4
ITAL 631	Advanced Conversation and Composition I	4
ITAL 632	Advanced Conversation and Composition II	4
KIN 690	Study Abroad in Kinesiology	4
LATN 503	Intermediate Latin I	4
LATN 504	Intermediate Latin II	4
LLC 525	Topics in World Cultures	4
LLC 535A	Professional Culture in Europe	4
MUSI 515	Music in World Cultures	4
NAIS 400	Introduction to Native American and Indigenous Studies	4
NR 444	The New Pirates of the Caribbean	4
NUTR 525	Food and Culture in Italy	4
PHIL 440C	Honors/The Copernican Lens: Finding a Place for Humanity	4
PHIL 520	Introduction to Eastern Philosophy	4
POLT 404	Introduction to Comparative Politics	4
POLT 440A	Honors/Global Justice	4
POLT 550	Comparative Government and Society	4
RUSS 503	Intermediate Russian I	4
RUSS 504	Intermediate Russian II	4
RUSS 515	Introduction to Russia: Contemporary Society and Culture	4
SPAN 503	Intermediate Spanish I	4
SPAN 504	Intermediate Spanish II	4
SPAN 525	Introduction to Spanish Cultures	4
SPAN 526	Introduction to Latin American Cultures	4
SPAN 631	Advanced Conversation and Composition I	4
SPAN 632	Advanced Conversation and Composition II	4
SPAN 686	Study Abroad/Granada	0,20

Writing Skills

Code	Title	Credits
ENGL 401	First-Year Writing	4
ENGL 401H	Honors/First-Year Writing	4

https://www.unh.edu/discovery/

Dropping & Withdrawal from Course

Deadlines for the drop and withdrawal periods vary by course duration and are posted on the **UNH Master Academic Calendar**.

Drop Period

During the drop period, a student may unenroll from a course through Webcat or by working with their academic advisor. A course dropped during the drop period will not appear on the student transcript.

Course drop period deadlines (webcat)

- Webcat drop period deadlines for courses are set based on the below logic for reference.
- Webcat drop periods close on the last day to drop at 11:59 p.m.

Fall Semester	Last day to Drop Course
Full Term	100% Refund - Second Friday
	50% Refund - Fifth Friday
Full Term - Grad Thesis	100% Refund - Third Friday
	50% Refund - Fifth Friday
Term 1	100% Refund - Second Friday
Term 2	100% Refund - Second Friday

January Term	Last day to Drop Course
All Terms	100% Refund - First Day of On Campus Courses
	0% Refund – 4th Business Day of On Campus Courses

Spring Semester	Last day to Drop Course
Full Term	100% Refund - Second Friday
	50% Refund - Fifth Friday
Full Term - Grad Thesis	100% Refund - Third Friday
	50% Refund - Fifth Friday
Term 3	100% Refund - Second Friday
Term 4	100% Refund - Second Friday

Summer	Last day to Drop Course
Full Term	First Day of Term
Term 5	Second Friday
Summer Session I	Fifth Business Day of Classes
Summer Session II	Tenth Business Day of Classes
Summer Session III	Eighth Business Day of Classes
Summer Session IV	Fifth Business Day of Classes
Special Summer Session*	*Count Weeks of Course: one business day of drop per week of the course

Withdrawal Period

Following the drop period, there is a withdrawal period. Withdrawal from a course during the withdrawal period will be recorded on a student transcript with a grade of W. The Withdrawal (W) grade is not included in GPA calculations. Students are responsible for consulting with their academic advisor and the Student Accounts Office to understand the academic and financial implications of receiving a Withdrawal (W) grade prior to making changes to their enrollment.

Course Withdrawal Period Deadlines

- Deadline dates for withdrawing from a course are set based on the below logic for reference.

Fall Semester	Last day to Withdraw from Course
Full Term	Ninth Friday
Full Term - Grad Thesis	Ninth Friday
Term 1	Fourth Friday
Term 2	Fourth Friday

January Term	Last day to Withdraw from Course
All Terms	Dependent on Term Dates & Drop Deadline (Listed on UNH Master Calendar if Applicable)

Spring Semester	Last day to Withdraw from Course
Full Term	Tenth Friday
Full Term - Grad Thesis	Tenth Friday
Term 3	Fourth Friday
Term 4	Fourth Friday

Summer	Last day to Withdraw from Course
Full Term	Not Applicable - Students Must Petition
Term 5	Fourth Friday
Summer Session I	Dependent on Term Dates & Drop Deadline (Listed on UNH Master Calendar)
Summer Session II	Dependent on Term Dates & Drop Deadline (Listed on UNH Master Calendar)
Summer Session III	Dependent on Term Dates & Drop Deadline (Listed on UNH Master Calendar)
Summer Session IV	Dependent on Term Dates & Drop Deadline (Listed on UNH Master Calendar)
Special Summer Session	Not Applicable - Students Must Petition

Exclusion from a Course After Enrollment

A student may be excluded from any course after enrollment, with or without penalty, upon recommendation of the instructor and with the approval of the dean of the college in which the student is registered, as soon as it becomes reasonably apparent that such student is unqualified to carry the course successfully.

Refund Policies & Deadlines

For refund policies see Student Accounts and Financial Aid. Refund deadlines are also posted on the UNH Master Academic Calendar.

Dual Degrees

General Policy

The option to pursue two degrees simultaneously enhances and broadens the education of certain students at the undergraduate level. The program is only for those students who can adequately handle the requirements for two different degrees and who can reasonably allocate the additional time and effort needed for the program. Except for specific five-year degree programs, a student may not pursue two different degree levels simultaneously.[1,2]

Requirements

- Students must petition the college dean or deans involved for permission to pursue a dual degree.
- If the student is planning to take one degree in a highly prescribed curriculum, they should register as a freshman in the appropriate school or college for that curriculum.
- It is expected that a candidate for two degrees baccalaureate will complete 32 credits beyond those required for the first degree. It is expected that a candidate for two associate degrees will complete 16 credits beyond those required for the first degree. General Education and degree requirements must be met for both degrees.
- It is expected that students will maintain a minimum 2.5 cumulative grade-point average.

- Students can earn more than one Bachelor of Science (B.S.) degree, provided that each degree is in a different field. Students cannot earn more than one Bachelor of Arts (B.A.) degree.
- Students can earn more than one Associate in Applied Science (A.A.S.), Associate in Arts (A.A.) or Associate in Science (A.S.) degree, provided that each degree is in a different field.
- UNH Durham students may not pursue a dual degree offered by the College of Professional Students- Online.
- UNH College of Professional Studies (CPS) Online division students may not pursue a dual degree offered by a UNH Durham academic college.
- Students must follow the rules and policies of the academic catalog in effect at the time of their admissions into their first degree program for all university requirements. Students follow the major requirements that are in effect during the academic catalog year the student entered the major program.

Supervision

As soon as a student is accepted as a candidate for two degrees, the appropriate dean(s) will appoint supervisors for each of the proposed majors. The supervisors and the student will work out a basic course plan for the two degrees and inform the appropriate dual degree dean(s) of the plan. The supervisors will maintain joint control over the student's academic program. The deans' offices and the supervisors will receive copies of the grade reports and other records for students pursuing two degrees.

Transfer Students

Transfer students already holding a baccalaureate degree from another accredited institution may pursue an additional dissimilar baccalaureate degree at the University of New Hampshire, provided they fulfill the requirements for the dual degree listed in the undergraduate catalog. The degree received at the first institution will be accepted by the University of New Hampshire as awarded by that institution.

[1] College of Professional Studies-Online students: a student may only be fully accepted to one degree program at a time. Students nearing completion of an Associate Degree within CPS-Online and who have applied to graduate, may also apply for admission to one of the College's Bachelor's Degree programs. Students nearing completion of their Bachelor's degree may apply for admission to a Graduate level or Post Baccalaureate program within CPS-Online through the existing application process.

[2] Applied Bachelor of Science degree programs are considered a different degree level than other bachelor of arts or bachelor of science degree programs. Students may not pursue an Applied Bachelor of Science (ABS) degree simultaneously with another Bachelor of Arts (BA) or Bachelor of Science (BS) degree.

Dual Majors

The University offers several designated Dual Major programs to students. Students that wish to pursue a dual major must first declare a primary major, as a dual major cannot stand alone. Students are required to complete a Senior Capstone in each major. One degree is awarded, that of the primary major.

Additionally, the University offers the opportunity for students to add a Second (Double) Major (p. 42).

Educational Reprieve

Upon petition to the Academic Standards and Advising Committee or College of Professional Studies - Online Petition Committee, a former UNH student who has taken no courses at UNH for five or more consecutive years may, prior to readmission, request Educational Reprieve. A student previously enrolled at the UNH Durham or Manchester campus who has taken no courses for three or more consecutive years may, upon application to a program in the College of Professional Studies - Online, request Educational Reprieve.

When Educational Reprieve is granted, all prior UNH coursework is excluded from the cumulative grade-point average, and a new grade-point average is started upon readmission. The former cumulative grade-point average will remain on the academic record for informational purposes. Credit from all courses in which a grade of C- or better was earned will be retained. Credit from Credit/Fail and Pass/Fail courses will also be retained. The notation "Educational Reprieve" will be displayed on the student's academic transcript.

If a student previously earned a D-, D, or D+ in a course that fulfilled a general education or Discovery requirement, they may request permission to have the course continue to fulfill that requirement.

Students may only petition for Educational Reprieve once. This policy only applies to undergraduate degree programs. All courses will continue to be considered when evaluating satisfactory academic progress for financial aid eligibility.

Note: Honors at graduation (p. 37) is based on the restarted grade-point average, provided the minimum graded credits required for honors have been completed at the University of New Hampshire subsequent to the reprieve.

Enrollment Status

Undergraduate Students

Degree candidate

A student who has been formally admitted into a program leading to a degree awarded by the University of New Hampshire.

Full time Status

Enrolled in 12 or more credits in a given semester.

Three-quarter time Status

Enrolled in 9 to 11 credits in given semester.

HALF time Status

Enrolled in 6 to 8 credits in a given semester.

Less than HALF time Status

Enrolled in fewer than 6 credits in a given semester.

Special student status (Non-Degree Students)

A student who has not formally been admitted into a program leading to a degree awarded by the University of New Hampshire. Such students are usually restricted to part-time study unless permission is granted by the Office of Admissions.

Enrollment Verification

An enrollment verification is a document indicating student enrollment status (Full Time, Three-Quarter Time, Half Time, or Less than Half Time), credit hours, and expected date of graduation.[1]

Ordering instructions are available on the Office of the Registrar's website.

[1]For verification of a degree, order an official transcript.

Equivalent Courses

Courses are equivalent when the same course content is taught under different course subject prefixes and/or course numbers.

Equivalent courses may be applied interchangeably to satisfy degree requirements, unless otherwise prohibited by program (major, minor, program) specific rules.

The repeated course (p. 42) rule is applicable if a student takes two equivalent courses. Equivalent courses also include courses in the past taught under different subject prefixes, numbers, titles, or a writing intensive or honors course section.

Examinations

Final Exams

Final Examinations at the end of each fall and spring full semester may be given in any course. All such final examinations must be scheduled during the designated final exam period on the academic calendar and given at the time scheduled.

No announced oral or written test/exam may be given during the last five days of classes preceding the designated final examination period. The following are exceptions:

- Practical examinations covering laboratory work may be given during the last five days of classes preceding the designated final exam period.
- In courses of a modular nature with several instructors, the instructor of the final module may schedule a final exam during the last five days of classes preceding the designated final exam period. Approval must first be obtained from the college dean.

Priority of Final Examinations and Scheduling Conflicts

Students scheduled for three final exams on the same day during the designated final exam period may choose to take only two final exams on the same day. The final exam scheduled in the middle (second) will be rescheduled. The instructor, in consultation with the student, will schedule a makeup final exam.

Students enrolled in a Term 2 or Term 4 course that conflicts with a final exam scheduled during the designated final exam period, the final exam has priority.

Two final exams scheduled at the same time during the designated final exam period should not occur. But, if such a conflict occurs the following priorities are applicable:

- Final exams in courses required by the students major have priority.
- If neither final exam is for a course required by the students major, the student works with both instructors to determine which final exam is rescheduled.
- If an online and in-person final exam are scheduled at the same time, the in-person final exam has priority.
- If a conflict between campuses occurs, the final exam scheduled on the campus of the students major has priority.

Final Common Exams

Students who are scheduled for two final common exams at the same time should check the Common Exam Priority List to determine which exam has priority.

Final Exam Day Curtailments

If a final exam day is curtailed, the Office of the Registrar will make alternate exam time blocks available during the remaining final exam period, as scheduling permits. Available make-up times may include Wednesday and Friday evening blocks (6:00-8:00 p.m. and 8:00-10:00 p.m.). Instructors may choose to reschedule their exams during one of these alternate time blocks. If a curtailment occurs on the last day of the final exam period, exams will not be rescheduled by the Office of the Registrar. In these cases, instructors are responsible for making alternate arrangements for their final exams, such as administering the exam online.

Weekly Common Exam Hours

Weekly common exam hours are designated by the University as "free" hours, which are reserved for convocations or common exams for multi-section courses. Normally, classes and labs are not scheduled during these hours. The Registrar may allow some exceptions to this policy; however, any classes or labs scheduled during these hours must excuse without penalty all students whose attendance is also required for common exams.

Designated Weekly Common Exam Hours
Tuesday, 12:40-2:00 p.m.
Thursday, 12:40-2:00 p.m. and 7:10-9:00 p.m.

Weekly common exam hours are not applicable to the College of Professional Studies (Manchester & Online divisions).

General Education Program & Requirements

UNH College of Professional Studies-Online Division, Undergraduate Degree Programs

The general education program is founded on fostering intellectual curiosity and preparing people to realize their full potential in a complex and changing world. Students explore major fields of knowledge and engage with ideas through action and application. With commitment to and respect for adults of all ages, the general education program will offer students opportunities to:

Communicate, particularly

- Write with clarity.
- Create digital or visual content.
- Communicate interpersonally.

Think critically and comprehensively, particularly

- Evaluate information.
- Reason with numbers.
- Think analytically.
- Define complex problems.

Apply knowledge to workplace and community, particularly

- Engage with diverse individuals, groups, and cultural frameworks.
- Participate in citizenship and community.
- Solve challenging problems using disciplinary knowledge.
- Reflect on learning to guide professional practice.

Communicate

Three required courses.

In transfer, a minimum of 3 credits is required to meet each course requirement.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
Total Credits		**12**

Think Critically and Comprehensively

Three required courses.

In transfer, a minimum of 3 credits is required to meet each course requirement.

Code	Title	Credits
CRIT 501	Introduction to Critical Inquiry	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking [1]	4
MTH 402	Math for Our World	4
or MTH 504	Statistics	
or MTH 510	Pre-Calculus	
Total Credits		**12**

[1] CRIT 602 Advanced Critical Analysis and Strategic Thinking *is not required at the associate level.* CRIT 602 Advanced Critical Analysis and Strategic Thinking *will not be waived for transfer students holding associate degrees but will be waived for students with an earned bachelor's degree in another field.* CRIT 602 Advanced Critical Analysis and Strategic Thinking *must be taken at UNH CPS and cannot be satisfied through transfer credit, testing, or other forms of prior learning assessment.*

Apply Knowledge to Workplace and Community

Four required courses. Select one course from each of the below areas.

In transfer, a minimum of 3 credits is required to meet each course requirement.

Knowledge of Human Behavior and Social Systems: Social Sciences Disciplines

Courses in this area recognize how changes occur in human development, behavior, social values, groups, and/or institutions.

Code	Title	Credits
CRIM 410	Introduction to Criminology	4
CRIM 425	Juvenile Justice	4
CRIM 555	The Criminal Justice System	4
CRIM 600	Crime Prevention and Control	4
CRIM 645	Crime Victim Rights and Remedies	4
CRIM 680	Corrections, Probation and Parole	4
CRIM 707	Constitutional Law	4
ECO 470	Principles of Economics	4
ECO 580	International Economics	4
ECO 635	Economics of Artificial Intelligence	4
POL 450	American Government and Politics	4
POL 554	Law and Society	4
POL 690	The US in World Affairs	4
PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
PSY 480	Infant and Toddler Development	4
PSY 525	Human Development	4
PSY 530	Social Psychology	4
PSY 602	Theories of Personality	4
PSY 603	Crisis Intervention	4
PSY 626	Educational Psychology	4
PSY 630	Psychology of Adulthood	4
PSY 646	Psychology of Occupational Stress	4
PSY 654	Counseling Theories	4
PSY 665	Principles of Assessment	4
PSY 685	Principles of Psychopathology	4
PSY 725	Cognitive Psychology	4
SOCI 410	Introduction to Sociology	4
SOCI 601	Society and the Individual	4
SOCI 603	Work and Society	4
SOCI 675	Child Abuse and Neglect	4
SOSC 445	Race & Diversity in the U.S.	4
SOSC 602	Men and Women in Cross-Cultural Perspectives	4
SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	4
SOSC 675	Dynamics of Family Relationships	4
SOSC 680	Stress and the Family	4
SOSC 710	Social Stratification and Inequality	4

Knowledge of Human Thought and Expression: Humanities Disciplines

Courses in this area allow students to ask and explore a variety of questions about human thought and experience.

Code	Title	Credits
ART 401	Introduction to Drawing	4
ART 403	Introduction to Watercolor	4
ART 512	Fundamentals of Design	4
ART 515	Digital Photography	4
ART 550	Art History: Western World	4
ENG 450	Introduction to Literature	4
ENG 505	Introduction to Language and Linguistics	4
ENG 545	The Media and Its Messages	4
ENG 555	Children's Literature	4
ENG 565	Modern American Writers 1865 to the Present	4
ENG 585	Short Fiction	4
ENG 604	Creative Writing	4
ENG 610	War Writing in the 21st Century	4
ENG 615	Young Adult Literature	4
ENG 620	Multicultural Perspectives through Literature	4
ENG 625	Readings in World Literature	4
ENG 645	Disability in Literature and Culture	4
ENG 675	Survey of Classic Literature Through Film	4
ENG 730	The Graphic Novel	4
HIS 402	Great Civilizations	4
HIS 410	United States History to 1865	4
HIS 411	United States History: 1865 to the Present	4

HIS 512	European History: Renaissance through the Industrial Revolution	4
HIS 590	Historical Methods	4
HIS 602	History of New England	4
HIS 611	Themes in World History	4
HIS 718	History of World War II	4
HIS 727	Vietnam War: An Historical Perspective	4
HUMN 470	World Religions	4
HUMN 480	Introduction to Ethics	4
HUMN 502	American Popular Culture	4
HUMN 560	Introductory Spanish I	4
HUMN 565	Introductory Spanish II	4
HUMN 625	Introduction to Cultural Theory	4

Knowledge of Physical and Natural World: Natural Sciences Disciplines

Courses in this area allow students to develop an understanding of the basic facts, principles, theories, and methods of physical and/or biological science.

Code	Title	Credits
PSY 710	The Biology of Addiction	4
PSY 740	Biopsychology	4
SCI 412	Introduction to Astronomy	4
SCI 470	Physical Geography	4
SCI 480	Introduction to Oceanography	4
SCI 490	Human Biology	4
SCI 502	Nutrition and Health	4
SCI 508	Issues in Women's Health	4
SCI 528	Natural History of Northern New England	4
SCI 541	Introduction to Environmental Science	4
SCI 550	Wellness and the Human Body	4
SCI 575	Introduction to Lifestyle Medicine	4
SCI 604	Principles of Exercise Science	4
SCI 610	Contemporary Issues in Personal and Global Health	4
SCI 615	Fitness and Health	4

Interdisciplinary Seminar

This upper-level seminar's specific topic varies by individual course section.

Code	Title	Credits
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	

[1] ***Note***: *IDIS 601 Interdisciplinary Seminar should be taken after all other general education requirements are completed. IDIS 601 is not required at the associate level. IDIS 601 will not be waived for transfer students holding associate degrees but will be waived for students with an earned bachelor's degree in another field. IDIS 601 must be taken at UNH CPS and cannot be satisfied through transfer credit, testing, or other forms of prior learning assessment.*

Transfer Policy

Students with a conferred Associate Degree from a regionally accredited post-secondary institution will have their lower level Undergraduate General Education requirements waived.

Grades

General Grading Policy

Grading policies as stated apply to all undergraduate students.

An instructor may assign grades as listed below. In general, these are letter grades. The intermediate grades are designated by adding a plus or a minus to the letter grade. Grade points assigned to plus grades are 0.33 higher than those assigned to the letter grade without the plus. Grade points assigned to minus grades are 0.33 lower than those assigned to the letter grade without the minus. In certain cases, where the format of the course creates difficulties for this type of grading, the course will be designated "credit/fail" if authorized by the faculty of the department in which the course is taught, the dean of the appropriate school or college, and the provost and vice president for academic affairs.

Students earning a semester or cumulative grade-point average less than 2.00 are placed on academic warning.

In an attempt to keep evaluation as objective as possible, instructors will assign a letter grade to a student exercising the pass/fail grading alternative. The instructor will not know that the student is exercising this alternative.

The credit hours or other work units covered by the F grade shall be considered in full in figuring the average, except that the F awarded in a pass/fail grading alternative or in a credit/fail course shall not be figured in the average. Courses covered by the CR or P grades shall not be considered in figuring the average. The number of grade points for a course is determined by multiplying the numerical equivalent of the grade times the semester hours of the course. The grade-point average is determined by the sum total of grade points divided by the sum total of graded credits (courses taken under the pass/fail grading alternative or credit/fail courses are not included in the divisor). The grade-point average is calculated to two decimal places. It is not rounded.

No course taken from another institution will be used in figuring the grade-point average.

The Faculty Senate recognizes that grade inflation exists at the University of New Hampshire. The senate, therefore, states that throughout this University the grade of C shall indicate competent, acceptable performance and learning in undergraduate courses; the grade of B shall indicate superior performance and learning; the grade of A shall indicate excellent performance and learning. These standards shall apply equally to all undergraduate courses, instructors, departments, subjects, and colleges.

Grading System

Letter Grade	Grade Points	Note
A	(4.00)	Excellent
A-	(3.67)	Intermediate Grade
B+	(3.33)	Intermediate Grade
B	(3.00)	Superior
B-	(2.67)	Intermediate Grade
C+	(2.33)	Intermediate Grade
C	(2.00)	Satisfactory, Competent
C-	(1.67)	Intermediate Grade
D+	(1.33)	Intermediate Grade
D	(1.00)	Marginal
D-	(0.67)	Intermediate Grade
F	(0.00)	Failure, No Credit
AF	(0.00)	Administrative Failure

CR	Credit: given in specific courses having no letter grades, designated credit/fail
P	Pass: given in a course taken under the student pass/fail grading alternative
W	Withdrawn
AU	Audit: no credit earned
IC	Incomplete Coursework: grade report notation for student's incomplete coursework
IA	Continuing Course or Thesis: indicates "incomplete" in a thesis or continuing course of more than one semester; the grade earned will replace "IA" assigned in previous semesters
IX	Grade not reported by instructor
NR	Not Resolved: pending academic integrity allegation

Administrative Failure (AF)

An AF grade is usually assigned to the student who stops participating in the course and has not completed course work sufficient for the assessment of course outcomes by the faculty member to issue a letter grade. The administrative failure is usually the result of a student's failure to officially drop or withdraw from a course they stopped attending. An AF counts as an F grade in the calculation of grade point averages.

Instructors should be prepared to report the last date of attendance for students receiving an AF grade. An AF grade can have financial implications for students utilizing Federal Financial Aid programs as well as Veteran and/or Military benefits.

Incomplete (IC)

A notation of incomplete (IC) shall be recorded on a student's record only if a major portion of the entire work of the course has been completed and if the instructor approves the student's request for additional time to complete the coursework. The initiation and responsibility for finishing the incomplete work rests with the student.

When the work of the course has been completed, a final grade for the term will be submitted to the student's college dean. The form indicating completion of the work must be filed with the Registrar no later than the middle of the semester immediately following the one in which the incomplete was granted. A petition requesting an extension of time beyond mid-semester, if approved by the instructor, may be submitted to the dean of the student's college. An extension will be granted by the dean only under unusual circumstances.

If the work is not completed within the specified time, the grade will be recorded as F.

An Incomplete (IC) grade in a student's final semester will delay their graduation date even if the course is not required for graduation.

Pass/Fail Grading

See detailed policy information about Pass/Fail grading (p. 39).

Grade Appeals

Instructors must be prepared to discuss and to explain the basis for their evaluations of students. If, after consulting the instructor, students still believe that they were treated unfairly, they have the right to seek redress from the chairperson of the department or program in which the course is offered. Under exceptional circumstances, a final appeal may be made to the dean of the college in which the program is offered.

Grade Changes

Requested grade changes submitted before the middle of the semester immediately following the one in which the grade was granted may be approved by the student's academic dean or their designee. After mid-semester, students must petition the Academic Standards and Advising Committee. Students in the College of Professional Studies Online Division petition the CPS Academic Exceptions Committee.

Graduation Certification

The graduation certification (degree conferral) process is managed by the Office of the Registrar. Degrees are awarded three times a year: December (Fall), May (Spring) and September (Summer). Candidates for graduation shall be certified as to their college requirements by the several college faculties to the Registrar, who shall recommend them to the president for their appropriate degrees provided they have satisfied all university degree requirements for graduation (p. 22).

Students must formally apply to graduate within the published deadlines on the master academic calendar to initiate the graduation certification process. Coursework must be complete by the graduation date for which the student has applied. Incomplete grades in the final semester will prevent graduation.

Honors Designations & Eligibility

Dean's List (Semester Honors)

Dean's list (semester honors) recognizes undergraduate students who demonstrate strong academic performance during a semester. Students who meet the criteria are formally designated to the Dean's List for that semester.

Undergraduate degree students may earn Dean's List honors by meeting either of the following criteria:

- Completed at least 12 letter-graded credits* in UNH courses during the semester and earn a semester GPA of 3.50 or higher; or
- Earn a semester GPA of 3.50 or higher and maintain a cumulative GPA of 3.50 or higher, regardless of the number of graded credits taken during the semester.

**Letter grades include standard grades such as A, B, C, etc. Credits graded CR (Credit) or P/F (Pass/Fail) do not count toward the 12-credit requirement.*

Honors Designation & GPA Requirement

- Highest Honors: 3.85-4.00
- High Honors: 3.65-3.84
- Honors: 3.50-3.64

Graduation Honors

Baccalaureate degree candidates

Students who have earned honors for their entire work at the University will be graduated with honors based on the final cumulative grade-point average, provided that a minimum of 64 graded semester hours (30 for CPS-Online students) has been completed in University of New Hampshire courses. The Latin equivalent of the honors designation will appear on the student's academic record and diploma. The student's honors designation will be noted in the Commencement program.

Honors Designation & GPA Requirement

- Summa Cum Laude: 3.85-4.00
- Magna Cum Laude: 3.65-3.84
- Cum Laude: 3.50-3.64

Associate degree candidates

Students who have earned honors for their entire work at the University will be graduated with honors based on the final cumulative grade-point average, provided that a minimum of 32 graded semester hours (16 for CPS-Online students) has been completed in University of New Hampshire courses. The English equivalent of the honors designation will appear on the student's academic record and diploma. The student's honors designation will be included in the Commencement program.

Honors Designation & GPA Requirement

- Highest Honors: 3.85-4.00
- High Honors: 3.65-3.84
- Honors: 3.50-3.64

Leave of Absence

Any student not subject to any academic or conduct separation wishing to seek a leave of absence from their degree program may consult with their respective college dean's office or the Office of the University Registrar. Reasons for requesting a leave of absence may include financial, academic, personal, or health reasons. Students who request a leave that begins while they are enrolled for a given semester will be subject to the rules governing refunds and the award of a grade of W. Students on a Leave of Absence, including a health leave of absence, may only request prior approval to take classes at another university for a term in which they are otherwise eligible to return to UNH. More information regarding this process, including details regarding when students are eligible to return, can be found in the transfer credit policy. Students are prohibited from study away program participation during the duration of the leave.

Any student taking a leave of absence from UNH for health reasons may consider the Health Leave of Absence process. More information about Health Leaves can be found on the Dean of Students website. Students who are granted a Health Leave of Absence must submit a letter of support from a treatment provider to be reviewed by the Dean of Students prior to approval and reinstatement. Students who are granted a Health Leave of Absence with an effective withdrawal date after the 5-week drop deadline must remain on leave for one complete semester following the semester in which the leave was granted.

To minimize issues with course availability, it is recommended that students returning from a leave notify the appropriate office (Registrar for leave of absence and Dean of Students for Health Leave of Absence) by June 1 when returning for the fall semester and by November 1 when returning for spring semester. Students who request reinstatement on or after the first day of classes will be denied. Students will be reinstated into the same major they were enrolled in at the start of their leave. Leaves of absence may not exceed two academic years or four semesters, exclusive of January Term and Summer Session. Military students who are deployed for longer than one year will be allowed to reactivate into original program requirements as long as they can provide official orders corresponding with their absence from the college. Failure to return from a leave of absence or to formally withdraw is considered a lapse in a student's degree status in the next semester after two academic years have elapsed. In these cases, a transcript notation is recorded "degree status discontinued," and will require students to apply for readmission as a previously enrolled student. Students who apply for readmission will still be asked to fulfill any outstanding responsibilities including receiving approval from the Dean of Students if they took a Health Leave of Absence. Exceptions to the leave of absence policy may be granted by the University Academic Standards and Advising Committee and only in unusual circumstances.

Majors and Options

A student earns an undergraduate degree with at least one declared major. Students must declare a major by the end of their sophomore year and must complete major, core curriculum (Discovery or General Education Program), Writing Program, and degree requirements.

Within majors of four-year programs, students often have choice among two or more 'options.' An option is generally a set of 15-24 required credit hours of related courses within a particular major.[1] The term 'option' is reserved for baccalaureate degrees. Options allow students to specialize within a discipline. The choice of option is recorded on the student's transcript.

[1] College of Professional Studies-Online bachelor's degrees require a minimum of 32 credits in the major/option.

Math & Statistics Courses

Mathematics Course Policies

Code	Title	Credits
MATH 418	**Analysis and Applications of Functions**	**4**
	*Some students who are bound for science but need additional college preparatory mathematics may be required to take this course prior to calculus.	
	*Students may place out of this course by taking a placement test.	
MATH 424A	**Calculus for Social Sciences**	**4**
	*Offered every Fall semester.	
	*Designed primarily for COLA/PAUL students.	
	*No placement test required.	
	*No prerequisite course required.	
MATH 424B	**Calculus for Life Sciences**	**4**
	*Offered every Spring semester.	
	*Designed primarily for COLSA students.	
	*No placement test required.	
	*No prerequisite course required.	
MATH 425	**Calculus I**	**4**

	*Offered every semester.	
	*Designed primarily for CEPS students.	
	*Prerequisite: MATH 418 with grade of C or better OR qualifying score on the placement exam.	
	*If prerequisite is not completed, students must drop this course.	
MATH 426	**Calculus II**	**4**
	*Prerequisite: MATH 425	
	*Students that take MATH 424A or MATH 424B are advised to additionally complete a set of supplementary worksheet modules administered by the Mathematics Center (MaC).	
	*If prerequisite is not completed, students must drop this course.	

Statistics Course Policies

Generally, students cannot receive academic credit for more than one of the statistics courses below. The exception is that a student may receive credit for MATH 539, MATH 540 or MATH 644, after taking a statistics course offered by a department outside of the Mathematics & Statistics Department.

Any student that has completed a statistics course and declares or changes to a major that requires a different statistics course must speak with the new major department.

The department may:

- Accept the statistics course already taken to fulfill the requirement.
- Require a competency exam in the major department's statistic course.
- Require the student to take a different statistics course, which may result in the student losing credit for the first statistics course taken. A student may receive eight credits for two introductory statistics courses if, and only if, the student takes the second of these as a requirement of the program they have moved into after taking the first statistics course.
- Take other action, determined by the major advisor.

Code	Title	Credits
Statistics courses offered by the Mathematics & Statistics Department		
MATH 439	Statistical Discovery for Everyone	4
MATH 539	Introduction to Statistical Analysis	4
MATH 540	Probability & Statistics	4
MATH 644	Statistics for Engineers and Scientists	4
Statistics courses offered by other Departments		
ADMN 510	Business Analytics and Statistics	4
BIOL 528	Applied Biostatistics I	4
HMP 540	Statistics for Health and Human Service Professionals	4
PSYC 402	Statistics in Psychology	4
SOC 402	Statistics	4

Minors

Policies

Bachelor's degree students may earn a minor in any undergraduate discipline designated by the University.[1] Students must consult with their major advisor and also the minor supervisor.

A minor typically consists of 20 credits with C- or better and a 2.0 grade-point average in courses that the minor department approves.[2]

- Students may not earn a minor in the same academic discipline as their major. *(E.g. Students majoring in psychology may not earn a minor in psychology).*
- Courses taken on a pass/fail basis may not be used for a minor.
- No more than 8 credits used to satisfy major requirements may be used for the minor.
- No more than 2 courses or 8 credits may be from transfer coursework. For some minors, all courses must be taken at UNH. The department chair or coordinator is responsible for the minor and must approve any transfer coursework.
- Some minors may have more restrictive requirements as indicated in the specific minors detailed information.
- UNH Durham students may not pursue a minor offered by the College of Professional Studies (CPS)-Online Division.
- UNH College of Professional Studies (CPS) Online Division students may not pursue a minor offered by a UNH Durham college.

Before a student's final term, an application to declare a minor should be made to the dean to have the minor included on the academic record.

View a list of current minors offered by the university.

1 Departments can approve a minor when a student has earned only 18 or 19 credits, provided that the student has completed a minimum of five (5) courses.

2 Students in an Applied Bachelor of Science (ABS) degree program may not earn minors.

Mutually Exclusive Courses

Courses are mutually exclusive when course content is too similar to earn credit for both courses.

Students may not enroll if they have completed any mutually exclusive courses with a passing grade.

Petition for Variance in Academic Policy must be submitted for a mutually exclusive course to:

- Request permission to register due to exceptional circumstances.
- Request permission to exercise the repeated course (p. 42) rule.

Note: credit will not be awarded for the most recent course completed, unless approved by petition.

Pass/Fail Grading

An undergraduate student working toward a bachelor's degree may elect to use the pass/fail grading alternative for a maximum of 4 credits per semester, not to exceed 16 credits during the student's matriculation.[1,2]

An undergraduate student working toward an associate's degree may elect to use the pass/fail grading alternative for a maximum of 4 credits per semester, not to exceed 8 credits during the student's matriculation.

Students in their first term at the University have the option to change up to 4 credits from graded to pass/fail at any point prior to the Friday of the 10th week of the semester and must obtain the approval of their advisor.[1]

All other degree students have the option to change up to 4 credits from graded to pass/fail prior to the end of the add period (the second Friday of classes) and must obtain the approval of their advisor.[1]

The pass/fail grading alternative may not be used for the following types of courses:

1. Core Curriculum requirements (Discovery Program or General Education Program Courses)

2. Writing Intensive requirements
3. Major and minor requirements
4. To repeat a course previously taken
5. Foreign language requirement

The minimum passing grade requirement for a course taken pass/fail is D- (0.67). The course grade of a pass/fail course will not be calculated into the grade-point average of the student, but the pass or fail will be recorded on the student's transcript. In the event of a pass, the student will receive the course credits (credit hours) toward degree requirements. The undergraduate student may elect the pass/fail grading alternative without permission or knowledge of the faculty member (course instructor). Upon request, the Registrar shall inform the instructor of any course of the percentage of students enrolled as pass/fail.

[1] Peter T. Paul College of Business and Economics courses may NOT be taken on a pass/fail basis by a student majoring in business administration, economics, or hotel administration.

[2] Students in bachelor's degree programs within the College of Professional Studies, Online may not exceed 8 credits within a degree program. Advanced approval of the Assistant Dean of Curriculum or Dean of the School of Education is required prior to registration.

Prerequisites

Course prerequisites are those courses that are required to have been successfully completed prior to enrolling in another course and must be so described in the University catalog.

Before registering for a course, students should check the course catalog to determine course prerequisites.

Students who fail a prerequisite to a course for which they are registered must drop the course. This policy applies to degree and non-degree students. It is the responsibility of the student to ensure all prerequisites or other requirements for a course have been met.

Prior Learning Assessment (PLA)

UNH College of Professional Studies (CPS) Online Students

In addition to previous college courses, prior learning acquired through workplace training and/or other life experiences is acknowledged and recognized as the foundation on which to build a degree program. The College provides options to demonstrate how prior learning may satisfy degree requirements.

Preapproved PLA Options

National Training Programs

The American Council on Education (ACE) and the National College Credit Recommendation Service (NCCRS) have evaluated and made recommendations regarding college credit for many formal training programs from business and industry, government, and nonprofit agencies. Credit will be awarded based on the recommendations of the ACE National Guide to Educational Credit for Training Programs and the College Credit Recommendations Directory of the National College Credit Recommendation Service. Students must request an official transcript from ACE or documentation of successful completion from the training sponsor. Official transcripts are sent directly to the College Undergraduate Admissions Office.

Workplace Training Programs Evaluated by CPS

CPS awards credit for college-equivalent learning gained through training. Training that the College has evaluated includes the NH Police Standards and Training Academy, the State of NH Division of Personnel Management, NH Fire Standards and Training, Primex, as well as other training programs. The student must provide official documentation of successful completion of the training program; documentation must be sent directly from the training sponsor to the college.

To pursue credit for preapproved prior learning, see detailed information and FAQs for preapproved prior learning options accepted by the College of Professional Studies-Online Division.

Note: Students must be accepted and enrolled in an undergraduate online degree program with UNH College of Professional Studies-Online Division for prior learning credit to be awarded and transcripted.

Non-Collegiate Course Providers

Credit may also be earned for courses taken with non-collegiate course providers, such as Saylor Academy, Sophia.org, and StraighterLine, which have been evaluated by the American Council on Education (ACE) or the National College Credit Recommendation Service (NCCRS) and recommended for college credit. In order for credit to be awarded, the ACE or NCCRS-recommended score must be achieved on the proctored exam.

Examination Programs

ACE and the NCCRS have also evaluated certain tests to demonstrate college-level knowledge and earn credit. The College recognizes competency demonstrated through Advanced Placement (AP), American Council on the Teaching of Foreign Languages (ACTFL) proficiency testing, College Level Examination Program (CLEP), DSST, NOCTI Business Solutions, and UExcel. Students are responsible for any fees associated with testing options.

The College will award the number of credits and the subject area recommended by ACE or NCCRS. For credit to be awarded, the content of the exam must meet an outstanding degree requirement. Credits acquired through testing cannot duplicate credits earned from other sources. The College limits on credit awarded for examination programs are for all of the sources listed combined.

Contact a CPS Academic Advisor prior to taking any standardized examination to ensure that the examination selected is not duplicative of course work completed or projected, or of other tests.

CLEP (College Level Examination Program)

Students who take a CLEP exam and do not receive a passing score must wait 90 days before retaking the exam. Detailed information about exams, and list of available subjects is available on the CLEP website.

DSST Exams (Defense Subject Standardized Test)

Students who take a DSST exam and do not receive a passing score must wait 90 days before retaking the exam. List of DSST exams and related fees, College Code: 8478.

Portfolio Assessment Options

Portfolio options are available to demonstrate college-level learning acquired through training and/or life experiences. Credit can be requested for specific College courses, or based on courses from other regionally-accredited institutions, or developed by the student with college-level learning outcomes. The following degree requirements are not eligible for portfolio assessment: Integrative Capstones; CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601A, IDIS 601B, or IDIS 601C; culminating teaching experiences; and field-based courses.

Experiential learning portfolios are developed in CRIT 603 Critical Inquiry in Prior Learning Assessment. In the course, students will work closely with their instructor to develop a portfolio that demonstrates prior learning usually based on the learning outcomes of a specific course needed for a student's degree completion. The portfolio will then be assessed by a trained evaluator and they will determine if the student has displayed evidence of prior learning and if credit may be awarded. After successful completion of the course, students may submit additional credit requests for evaluation. If submitted within one year of completion of the course, no portfolio evaluation fees will apply. If submitted after one year of completion of the course, an evaluation fee of $350 per course equivalent credit request will apply. All credit requests must be submitted within three years of successful completion of the course. CRIT 603 Critical Inquiry in Prior Learning Assessment can be repeated no more than once after withdrawal or failure. Portfolio assessment of prior learning is not available to students who are within 16 credits of degree completion.

If students have completed a prior learning portfolio and received credit at a regionally accredited college or university that isn't a member of the Consortium for the Assessment of College Equivalence (CACE), they may submit their portfolio to the College for assessment. Students choosing this option will be given information about the required portfolio components, evidence validity criteria, and the standards for college-level equivalence. Once the portfolio has been submitted to the College, the Director of Liberal Arts will provide an initial assessment of whether the portfolio meets the minimum requirements to be sent to a faculty evaluator. The student will assume responsibility for any further development of the portfolio based on this initial review prior to sending the portfolio for faculty assessment. The prior learning assessment fee will be charged at the point the student notifies the college that they want the portfolio to be sent for evaluation.

Prior Learning Credit Limits

CPS will apply a maximum of 30 prior learning credits towards an Associate Degree, 45 credits toward an Applied Bachelor of Science and 60 credits towards a Bachelor of Arts or Bachelor of Science Degree for any combination of the prior learning credit options. These credits do not count in the residency requirement for degree programs. Prior learning credit requests should be made within six months of acceptance to maximize potential credit awarded.

Fees

No fee is charged to award credit for standardized exams, training evaluated by the American Council on Education, or the National College Credit Recommendation Service or the Consortium on the Assessment of College Equivalents (CACE). A PLA fee of $350 is charged for credit awarded for workplace training and occupational credentials that the College has previously evaluated and preapproved for credit. For up to one calendar year after admission to the College, the PLA fee covers multiple submissions of documentation. After one calendar year, a fee of $350 per training experience or credential submitted will be charged.

Financial Aid may be used to pay the PLA fee if the student has financial aid eligibility, submits an Award Revision Request Form indicating their intent to use financial aid for this purpose, and completes the Federal Title IV Financial Aid Payment Authorization Form.

Progress Reports

In the weeks preceding the drop deadline, course instructors will provide early alert indicators on any students in their classes with below average performance as indicated through absences/lack of participation, missing/late assignments, or quiz/test results. Some faculty may not assess substantive progress until the Midterm Examination. Faculty members are able to issue an alert or make a referral on individual or groups of students by logging in to myWildcat Success anytime during the semester or term.

Registration

Course attendance in scheduled classes is limited to students who are officially enrolled/registered or approved to audit the course.

Students will receive credit only for courses in which they are officially enrolled/registered.

Priority Registration

Priority registration is the period before open registration in which undergraduate degree students may begin course registration for an upcoming fall/spring semester or term. Dates and deadlines for priority registration are designated by class level (p. 20) and posted on the Academic Calendar. Registration access codes (RACs) are required to complete priority registration by Durham and Manchester undergraduate degree students.

Early Priority Registration

- Veteran students are assigned early priority registration. This means that Veteran students register during the initial registration period of their designated class level.
- Student athletes are assigned early priority registration. This means that student athletes register during the initial registration period for their designated class level.
- Honors students are assigned early priority registration. This means that Honors students register during the initial registration period for their designated class level.

Registration Access Code (RAC)

Registration access codes are assigned to avoid overloading the registration system during the high demand course registration periods for fall and spring courses. Registration access codes are assigned to eligible students based on their current class level (p. 20). RAC times are assigned randomly within class levels from earliest to latest and cannot be changed. RACs are released to students by their academic advisor.

- **Durham and Manchester** undergraduate degree students are assigned a RAC for fall and spring priority registration.

Account Holds

Certain holds on accounts will prevent registration and can be viewed in Webcat.

Repeated Courses

Any student who is regularly registered for a course and who satisfies the requirements shall receive credit except that no student shall earn credit for the same course twice, unless otherwise noted in the catalog. When students repeat a course, the former credits and grade points shall be removed prior to the calculation of their cumulative grade point average and the repeated course information shall be added. Both grades are visible on the official transcript. A notation will be made on the student's record beside the grade received on the repeated course indicating that it is a repeat. In order for a course to be considered "repeated", the course numbers and titles must match exactly. If the course numbers and titles do not match exactly, the student must obtain written permission from their academic advisor and the endorsement of their college dean on a Petition for Variance in Academic Policy form before the adjustment will be made to their transcript. Students may not use the pass/fail grading alternative to repeat a course. Both the original course and the repeated course must be UNH courses.

Residence Requirement

"Residence" is being enrolled in University of New Hampshire courses after admission to and matriculation in a degree program. Students who are candidates for bachelor's and associate degrees must attain the last one-fourth of their credits toward the degree in residence unless granted permission by the Academic Standards and Advising Committee to transfer part of this work from other accredited institutions.[1]

[1]College of Professional Studies-Online students: academic residency begins on the date of application to a degree program. Prior Granite State College credits earned as a non-degree student will apply to the residency requirements if the credit is applicable to the student's approved plan of study. For an Associate Degree, residency is 16 credits. For any Bachelor's Degree, residency is 30 credits. A student who has completed a Granite State College Associate Degree must earn an additional 14 credits in residence in the Bachelor's program.

Second (Double) Major

Undergraduate degree students may choose to fulfill the requirements of two major programs.

- UNH Durham and Manchester students must obtain approval from the department offering the second major, and the dean of the college in which the second major is offered.
- UNH CPS Online students must work with their academic advisor to submit a change of program form to request the second major.

The following rules are applicable to all students pursuing a second major:

- If the two majors confer different degrees (e.g., B.A. vs. B.S.), students must choose one degree to be awarded and fulfill all degree requirements for the selected degree.
- A maximum of eight (8) credits may be shared between the two majors.
- Students in an Applied Bachelor of Science degree program may not pursue a second major.
- UNH Durham students may not pursue a second major offered by UNH CPS Online.
- UNH CPS Online students may not pursue a second major offered by UNH Durham or Manchester.

Student Designed Majors

Under special circumstances, students may design their own majors. This option is offered for highly motivated and self-disciplined students who seek a course of study that is not available through existing programs at the University. It allows students, with the close supervision of faculty members, to cross department and college lines and to create educational experiences on and off campus as part of individual programs of study.

Student-designed majors are administered by a committee of elected faculty that operates through the Office of the Provost and Vice Provost for Academic Affairs. Students who want to design their own majors are required to give the committee evidence of careful thought and planning in a proposal.

Proposals are only reviewed once a semester. Fall submissions are due by October 15 of the student's junior year. Spring submissions are due by February 25. The committee will convene soon after the deadline to review the proposals. Under no circumstances will the committee consider a senior year proposal.

Proposal guidelines are available in the Office of the Provost.

The College of Professional Studies-Online, offers several bachelor's degree programs in Individualized Studies within designated areas. Individualized Studies majors develop an approved program of study leading to a specific educational or professional goal. Students interested in the Individualized Studies major should contact their academic advisor. The student will work with their advisor and the Director of Liberal Arts to determine if an Individualized Studies degree is feasible. Once the student's degree plan has been researched and finalized, the student must submit a proposal to Academic Affairs for approval.

Study Away Eligibility

Academic Eligibility

Students enrolled in UNH baccalaureate or Thompson School of Applied Science degree programs may participate in a UNH Partner, Faculty-led or Exchange global education program provided they meet the following eligibility criteria:

1. Must have earned at least 32 credit hours at the time of departure, at least 12 of which must have been earned at the University of New Hampshire at the baccalaureate level.
   a. Undeclared students are eligible to participate in study abroad programs and should work closely with their academic advisor to be aware of any potential consequences relative to degree completion.
2. Must have a minimum 2.5 cumulative grade point average at the time of application to and at the time of departure for the study away program. Study Away Programs provided by UNH or approved institutions may have higher minimum GPA requirements.
   a. For some faculty-led programs, students who have a cumulative GPA between 2.0 and 2.5 may be considered on a case-by-case basis. Students who wish to be considered for an academic

variance must petition the Academic Standards and Advisory Committee or ASAC with the support of their primary academic advisor and the student's college dean's office. ASAC approval does not guarantee acceptance into the individual program.

3. Athletic Team members participating in Other International Experiences (OIE programs), including first-year students, will establish eligibility for their team trip with the Athletics department. If an athlete is participating in a regular study away program, they will need to follow the UNH study away eligibility requirements as well as any specific criteria required for the program they are applying to.

Additional Information

- Graduate Students do not need to establish eligibility.
- Students who seek to study-away as first-year students will need to submit a petition to request a variance in academic policy to the Academic Standards and Advising Committee (ASAC).
- Transfer students, except transfer students from Thompson School of Applied Science (TSAS), are not eligible to study away during the first semester of their baccalaureate program at UNH.
- Students returning from a leave of absence are not eligible to study-away their first semester back.

Eligibility and Student Conduct Policy

Students studying away must have a clear conduct record at the time of application, departure and while abroad; they are held to the Student Rights, Rules, and Responsibilities throughout their time abroad.

These same conditions will apply in instances where the conduct issue has been addressed through the court system rather than through the University's Student Conduct system.

Students who are on University Disciplinary Probation or who have a demonstrated track record of prior misconduct may be deemed ineligible for education abroad. They have an opportunity to petition. Student eligibility related to conduct will be reviewed and students will be notified if ineligible and be given the opportunity to petition ASAC.

Transcripts

Official academic records are maintained in the Office of the Registrar at the University of New Hampshire.

A university transcript (academic record) is an official document issued by an educational institution that provides a comprehensive record of a student's academic achievements, including courses taken, grades received, GPA, and degree(s) conferred. Official transcripts bear the University seal and the signature of the University Registrar. The university partners with Parchment for its online ordering and official transcript production. Unofficial transcripts are available to students in Webcat.

Transcript Keys

UNH Transcript keys provide guidance to assist in interpreting transcript terminology and grading systems.

Transfer Credit Policies & Resources

Transfer Credit Policies

General Eligibility Requirements

- Transfer courses must be completed at a **regionally accredited college or university**.
- Transfer courses must be completed with a **grade of C- or higher**.
- An **official transcript** sent directly from the institution where the transfer course was completed is required.

Exclusions

- Courses completed on a Pass/Fail or Credit/Fail grading basis; except labs associated with a lecture course.
- Elementary-level foreign language courses, if two or more years of the same language have already been completed in high school.
- Mathematics courses that are below the College Algebra level.
- Remedial or developmental courses.
- Non-credit certificate courses.
- UNH students whose status is suspended due to academic performance may not transfer credits earned during the period of required separation from the University.
- UNH students whose status is suspended due to a conduct violation may not transfer credits earned during the first semester of the suspension from the University.

Grades and GPA

- Transfer credit is not calculated into the UNH grade point average (GPA).
- Transfer course grades are not shown on the UNH transcript, except for courses awarded study away transfer credit.
- If credit has already been earned for a UNH course, transfer credit will not be awarded for an equivalent course completed at another institution and may not be used under the UNH repeated course rule.
- A department may accept an equivalent course completed at another institution to satisfy a specific major/program requirement. In these cases, no transfer credit is awarded, but the grade earned is recorded. The course does not count toward the total credits required for the degree.

Discovery Program Requirements

To apply transfer credit toward UNH's Discovery Program requirements:

- Courses must be completed with a minimum of 2.5 or more semester credits.
- The Inquiry (INQ) requirement must be completed at UNH.

AP Scores and CLEP Exams

To receive transfer credit for Advanced Placement or College Level Examinations:

- Official scores must be sent directly from the College Board to UNH.
- The Registrar's Office will review transfer credit eligibility and apply credit to the student's academic record.
- A notification will be sent to the student's UNH email account when completed.

Approved AP Exam Scores & UNH Equivalency Guides

- Students admitted before Fall 2025
- Students admitted Fall 2025 and after

Credit Conversion

Courses completed at other institutions are transferred to UNH based on semester hour credits:

- A course completed at another institution for 3 credits will be converted to 3 semester hour credits at UNH.
- Courses measured in quarter hours, term hours, or units will be converted to semester hour credits during the transfer credit evaluation process.

Maximum Credit Limit

Durham & Manchester Undergraduate Degree Programs

- 48 credits toward an associate degree
- 96 credits toward a bachelor's degree.
- 72 credits from associate-level coursework toward a bachelor's degree.*
  **Not applicable to Manchester or Thompson School of Applied Science students.*

CPS Online Undergraduate Degree Programs

- 44 credits toward an associate degree.
- 60 credits toward an applied bachelor of science degree.
- 90 credits toward a bachelor of arts or bachelor of science degree.
- In Bachelor's Completion programs, the earned associate degree transfers in full.

Additional information about transfer credit policies for CPS Online students.

Leaves of Absence

Students on an approved leave of absence must be eligible to return to UNH when they take a course at another institution. If a student is not eligible to return at the time the course is completed, the credit will not be considered for transfer.

World Language Courses

Depending on a student's prior language study and the level of the coursework, transfer credits may be considered to fulfill the Bachelor of Arts World Language Proficiency Requirement or may count as general elective credit toward the total credits required for the degree program.

Bachelor of Arts – World Language Proficiency Requirement Credit

Elementary-level language courses may be considered to fulfill this requirement:

- If the coursework is in a different language than the student studied for two or more years in high school.
- If the student completed the coursework in high school through an approved college dual enrollment/credit program (e.g. Running Start, Early College, etc.).
- If two or more years of an elementary-level language have been completed in high school and the student later completes elementary-level coursework in the same language at a college or university, the transfer coursework must be completed at least five years after the student last studied the same language in high school.
- If two or more years of an elementary-level world language have been completed in high school within the previous five years, transfer credit coursework in the same language must be completed at the intermediate level or higher.

Some majors may accept American Sign Language (ASL) courses to fulfill the BA World Language Proficiency Requirement. Refer to the program requirements in the academic catalog *to determine if ASL courses are accepted for a specific major. ASL courses follow the same elementary and intermediate-level course requirements as any other world language course.*

General Elective Credit

Effective Fall 2025, students that have completed two or more years of a language in high school may be eligible for general elective credit for transfer credit in the same language. Transfer credit will count toward the total credits required for the degree program.

Transfer Credit Prior Approval

Current undergraduate students at UNH Durham or UNH College of Professional Studies, Manchester must request a transfer credit prior approval before enrollment in a course at another institution.

Requesting a transfer credit prior approval allows students to plan future transfer coursework and ensures the course is eligible for transfer to UNH. Additionally, the evaluation determines whether a course will fulfill any specific program requirements, such as major, minor, Discovery, or elective credits.

UNH College of Professional Studies, Online students should visit the CPS Transfer Credit Evaluation webpage for details on how to request a transfer credit evaluation.

Prospective or incoming UNH transfer students should visit the Office of Admissions transfer webpage for details on how to request a transfer credit evaluation.

Transferring Completed Coursework

Learn how to transfer completed coursework from another institution to UNH, submit offical transcripts, and navigate the transfer credit process. More information and a step-by-step guide are available on the Office of the Registrar's website.

Variable Credit

Credits in a variable credit course are established either by the student with departmental approval or assigned by the department at the beginning of the semester. In either case, the student may make the change in Webcat by the end of the add period.

Withdrawal from the University

A student may voluntarily withdraw from the University by obtaining, completing, and submitting a withdrawal form from the Registrar's Office through the withdrawal period.

Failure to register in any regular semester or to formally withdraw is considered a lapse in a student's degree status and a transcript notation is recorded "degree status discontinued." The student must subsequently apply for readmission[1].

If a student receiving federal financial aid officially (W) or unofficially (AF) withdraws from coursework in a term or from a degree program, return policies designated by the U.S. Department of Education will apply.

A prorated schedule is used to determine the amount of federal aid a student has earned at the time of the withdrawal up to the 60% point of a student's enrollment. Unearned aid will be returned to the U.S. Department of Education and the student is responsible to the University for any balance incurred as a result of the return.

For students who unofficially withdraw from the term, federal financial aid regulations allow that a student's aid be prorated based on presumed attendance through the half-way point of the payment period or period of enrollment.

If a student withdraws from a course, but is registered for a late start course in the same term (and the drop date has not passed for the late start course), then written confirmation of the student's intent to return is required to be provided to the Office of Financial Aid or a return calculation will be performed.

Students receiving aid through the Department of Defense's (DoD) Federal Tuition Assistance program are subject to the same prorated schedule of returning unearned aid if the student officially or unofficially withdraws from a course(s). The calculation will be based on the student's last date of attendance in the course(s). The unearned aid will be returned to the DoD. Students are responsible for any balances that results from the calculation. The only exception is when the student stops attending due to military obligation.

[1]College of Professional Studies Online division students are exempt from the continuous enrollment requirement.

World Language Proficiency Requirement

The Bachelor of Arts degree requires proficiency in a world language.* This requirement may be fulfilled by completing the equivalent of a full-year elementary-level course in a language not previously studied, or by completing the equivalent of a semester of a course in a world language at the intermediate or higher level, or by earning credit through an approved Advanced Placement or College Board foreign language achievement test (minimum scores vary). The World Language Proficiency requirement must be satisfied by the end of the sophomore year. It is strongly advised that students check with academic departments or academic centers to identify department-advised specific world language proficiency options.

A Student with a documented disability who wishes accommodation on the basis that the disability will prevent them from successfully mastering a world language requirement, or whose world language requirement was waived in high school because of a documented disability, must contact Student Accessibility Services, Smith Hall, (603) 862-2607 (Voice/TDD).

**Previously this requirement was referred to as the Bachelor of Arts Foreign Language Proficiency Requirement.*

Writing Program & Requirements

In 1995, the Academic Senate established the Writing Program as an expression of the following fundamental values and goals for writing at UNH: *As the cornerstone of any higher education, academic and disciplinary literacy is the concern of the entire faculty and the whole University curriculum. Understanding that literacy is a long-term development process, the University community is committed to the following goals for student writing and learning:*

- *Students should use writing as an intellectual process to learn material and to discover, construct, and order meaning.*
- *Students should learn to write effectively in various academic and disciplinary genres for professional and lay audiences.*
- *Students should learn to display competence with the generic features and conventions of academic language.*

In order to help realize the above goals, writing intensive (WI) courses were established as well as the University Writing Requirement (UWR).

All questions can be directed to UNH.Writing.Programs@unh.edu (unh.writing.programs@unh.edu)

University Writing Program Requirements

All bachelor's degree candidates are required to complete four writing-intensive courses. In order to fulfill the University Writing Requirement, all undergraduates must complete the following four[1] courses with a passing grade:[2]

- ENGL 401 First-Year Writing
- One Writing Intensive (WI) Course in the Major
- One Writing Intensive (WI) Course at the 600 Level or Above
- One Additional Writing Intensive (WI) Course (any other)

[1] Students pursuing more than one major or dual degrees must complete a Writing Intensive course in each major.

2 Exceptions to the Writing-Intensive (WI) Requirement

Frequently Asked Questions

"Can the same course satisfy the course-in-the-major requirement and the 600-level or above requirement?"

Answer: Yes, one course can satisfy both of these requirements (see pattern B below), but the course would only count as one of the three WI courses needed. In this case, the student would need to take two other WI courses (in addition to ENGL 401) to satisfy the requirement. Thus, a complete WI sequence would conform to one of the two generic patterns below:

A) Separate Courses for the 600+ Level and in the Major Requirements

1. ENGL 401 First-Year Writing
2. WI in the Major (any level)
3. WI @600+ level (any)
4. WI (any)

B) The Same Course for the 600+ Level and in the Major Requirements

1. ENGL 401 First-Year Writing
2. WI in the Major @600+ level
3. WI (any)
4. WI (any)

Note: the numbers in the above examples are for reference and don't reflect a required sequence. A particular major may have more specific requirements that may depart from the above models.

"I have a double-major. Do I have to take a WI course in each major?"

Yes, you do need to take a WI course in each major. However, you may substitute the fourth (WI "any") course for the additional course in your major. You do *not* have to take an *additional* WI course beyond four WI courses. If you have two majors, your WI courses would conform to the sequence below:

- EN401 (First Year Writing)
- A Writing Intensive (WI) Course in the First Major
- A Writing Intensive (WI) Course in the Second Major
- A Writing Intensive (WI) Course at the 600 Level or Above (any)

"I am enrolled in a Dual Major program. Do I have to take an additional WI course in my major?"

Yes, you do need to take a WI course in the Dual Major. Students must first declare a primary major before enrolling in a dual major. When applicable, the student may apply the same course sequence as the Double Major sequence listed above.

"My major doesn't list any WI courses in the catalogue. What do I do?"

If a major does not offer a WI course in their program, the student can petition to have their capstone or senior thesis course count for the WI credit in the major. The student will then still need to account for the other remaining three WI course requirements. See the section on "WI Transfer Credit and Exceptions" below for how to petition for WI credit.

"I am pursuing Dual Degrees. Do I have to complete 2 sets of WI requirements?"

No. If you fulfill all 4 requirements of the WI program, you have met those requirements for both degrees. For more information on Dual Degrees, see the Academic Catalogue.

The Rationale for Writing and Learning at UNH acknowledges that the WI course structure provides a minimum framework for writing in the curriculum and that there will be writing in non WI-designated courses. The Writing Committee's position is that WI Course Attributes are definitive and that only courses bearing the WI Attribute will count for the WI requirement. In short, students are expected to enroll in UNH WI-designated courses to satisfy the WI requirement.

Writing-Intensive (WI) Course Identification

WI courses are identified by "Writing Intensive Course" in the "Attributes" section of the course descriptions and/or a W following the course number.

Example:

CEP 795W (01) - Investigations
Special assignments in readings, investigations, or field problems, or teaching experience. May be repeated.
Attributes: Writing Intensive Course
Instructors: STAFF

Some courses have both writing-intensive and nonwriting-intensive versions, such as HIST 405 History of Early America and HIST 405W History of Early America. In these cases, only the sections with the "W" in the course number are writing intensive.

Writing-Intensive Courses Master List

Not all courses below are offered every semester. See the course schedule for course offerings by semester.

Code	Title	Credits
ACC 724	Auditing	4
ADMN 400	Introduction to Business	0,4
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 575	Behavior in Organizations	4
ADMN 799	Honors Thesis/Project	4-8
AGFS 689W	Greenhouse Management and Operation	4
AGFS 733W	Advanced Topics in Agriculture and Food Systems	4
AGFS 760W	Integrated Pest Management	4
AGFS 795W	Investigations	1-4
AMST 444C	Picturing America: The Arts & Social Change	4
AMST 444D	Long-Ago Stories Behind Everyday Life	4
ANSC 522	Ethical Horsemanship - Considerations and Theory	3
ANSC 543	Technical Writing in Animal Sciences	2
ANSC 602	Animal Rights and Societal Issues	4
ANSC 640	Principles of Riding Instruction	4
ANSC 690	Livestock and Wildlife in Namibia: Challenges, Opportunities and Geography	4
ANSC 728	Advanced Dairy Management II	4
ANSC 750	Collaborative Farm Design and Development	4
ANSC 795W	Investigations	1-4
ANSC 799	Honors Senior Thesis	1-4
ANTH 411W	Global Perspectives on the Human Condition: An Introduction to Anthropology	4
ANTH 527	Humanities and Religion	4
ANTH 620	Ritual and Religion of Ancient Mesoamerica	4
ANTH 625	Sexuality in Cross-Cultural Perspective	4
ANTH 645	Cultural Sustainability and the Role of Public Archaeology	4
ANTH 650	Anthropology of Migration and Movement	4
ANTH 665W	Forensic Cold Case Investigation	4
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa	4
ANTH 695	Globalization and Global Population Health	4
ANTH 697	Special Topics	4
ANTH 699	Senior Thesis	4,8
ANTH 699H	Honors Senior Thesis	4,8
ANTH 785	The Anthropology of Dreams and Dreaming	4
ANTH 797	Advanced Topics	4
APST 605A	Practicum Business & Technology	4
APST 695A	Integrative Capstone	4
APST 705	Grant Writing	4
ARTH 400	Topics in Art History	4
ARTH 444	Mona Lisa to Much Ado About Nothing: An Introduction to Renaissance Culture	4
ARTH 444B	Art and Money	4
ARTH 583	Baroque Art: Realism, Caricature, Shock	4
ARTH 674	Greek Art and Architecture	4
ARTH 678	Romanesque and Gothic Art	4
ARTH 681	Early Renaissance Art	4
ARTH 682	The High Renaissance	4
ARTH 686	Sex and Sensuality in 18th-Century Art	4
ARTH 688	Histories of Late 19th & 20th Century European Modernism	4
ARTH 694	Vision and Modernity: From Panorama to Early Film	4
ARTH 695	Topics in Art History	4
ARTH 697	Topics in Asian Art	4
ARTH 699	Museum Studies	4
ARTH 795	Understanding Art History: An In-Depth Overview	4
ARTH 799	Seminar in Art History	4
BIOL 541W	Ecology	0,4
BIOL 714W	Model Organisms in Biological and Medical Research	2
BIOL 720	Plant-Animal Interactions	4
BIOL 795W	Independent Investigations	1-4
BIOL 799H	Honors Senior Thesis	2-8
BIOT 501	Ethical Issues in Biology	4
BIOT 704	New and Emerging Biotechnology	4
BMCB 659W	General Biochemistry Lab	2
BMCB 754	Molecular Biology Research Methods	5

BMCB 755	Protein Biochemistry Laboratory	5
BMCB 795W	Investigations in Molecular and Cellular Biology	1-4
BMCB 799	Senior Thesis	1-4
BMCB 799H	Honors Senior Thesis	1-4
BMS 610	Biomedical Lab Management	4
BMS 718	Mammalian Physiology	4
BMS 730	Ethical Issues in Biomedical Science	4
BMS 735	Molecular and Cellular Parasitology	4
BMS 749	Case Studies in Hematology and Immunology	2
BMS 750	Case Studies in Microbiology	3
BMS 780W	Clinical Human Pathophysiology	3
BMS 795W	Investigations in Biomedical Science	1-8
BMS 799	Senior Thesis	1-4
BMS 799H	Senior Honors Thesis	1-4
BSCI 620	Global Science Exploration	4
BSCI 650	Antibiotic Discovery Lab	3
BSCI 740	Aquatic Microbiology	4
BUS 620	Organizational Behavior	4
BUS 705	Business Ethics	4
CA 500	Media Writing	4
CA 512	Screenwriting	4
CA 610	Communication Technologies and Culture	4
CA 612	Narrative	4
CA 615	Film History/Theory and Method	4
CA 618	Documentary	4
CA 720	Seminar	4
CEE 520	Environmental Pollution and Protection: A Global Context	0,4
CEE 635	Engineering Materials	0,4
CEE 650	Fluid Mechanics	0,4
CEE 724	Environmental Engineering Microbiology	4
CEE 798	Project Planning and Design	2
CEP 614	Fundamentals of Planning	4
CEP 777	Topics in Community Planning	4
CHBE 612	Chemical Engineering Laboratory I	3
CHBE 708	Chemical Engineering Design	4
CHBE 713	Chemical Engineering Laboratory II	3
CHBE 762	Biomedical Engineering	4
CHBE 763	Bioengineering Design I	2
CHBE 764	Bioengineering Design II	4
CHEM 798	Senior Seminar	1
CHEM 799	Senior Thesis	4
CLAS 444	Individual and Society in the Ancient World	4
CLAS 444D	Athens, Rome, and the Birth of the United States	4
CLAS 530A	Classical Literary Performance Genres: War and Adventure in Ancient Epic	4
CLAS 550A	Identities and Difference in the Ancient World: Greek and Roman Women	4
CLAS 550C	Identities and Difference in the Ancient World: Sex and Desire in Greece and Rome	4
CLAS 601	Classical Myth II: The Power and Persistence of Myth	4
CLAS 701W	Capstone Course	4
CMN 504	Introduction to Argumentation	4
CMN 525	Persuasion & Public Relations	4
CMN 607	Persuasion in American Politics	4
CMN 614	Gender, Race and Technology	4
CMN 620W	Global Media, Culture, and Power	4
CMN 622	Digital Rhetoric	4
CMN 634	Media and Politics	4
CMN 635	Contemplative Media Studies	4
CMN 637	Controversy and Reasoning in Law	4
CMN 647	Rhetorical Criticism of Media	4
CMN 650W	Critical Perspectives on Film	4
CMN 656	Environmental Communication and Rhetoric	4
CMN 657W	Media and the Environment	4
CMN 662	Public Dialogue and Deliberation	4
CMN 666	Conversation Analysis	4
CMN 667	Popular Music Studies	4
CMN 670	From Silicon Valley to Foxconn: Global Digital Capitalism	4
CMN 685	Gendered Rhetorics	4
CMN 696W	Seminar in Media Studies	4
CMN 697	Seminar in Rhetorical Study	4
CMN 698	Seminar Interpersonal Studies	4
CMN 702	Seminar in Interpersonal Communication Theory	4
CMN 703	Seminar in Rhetorical Theory	4
CMN 719	Surveillance and Society	4
CMN 735	Media & Ethics	4
CMN 740	Seminar in Communication Research and Theory	4
CMN 756	Rhetorics of Display	4
CMN 762	Organizational Communication and Society	4
CMN 772	Seminar in Media Theory	4
CMN 780	Communication and Sports Coaching	4
CMN 785	Communication and Deliberation Across Differences	4
CMN 788	Opening Everyday Interaction	4
CMPL 622	Human Computer Interaction	4
CMPL 643	Managing Information Technology	4
CMPL 795	Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
CMPL 797	Integrative Capstone: Best Practices in Information Technology	4
COM 440	Persuasive Communication	4
COM 590	Professional Communication	4
COM 647	Writing for Visual Media	4
COM 660W	Leveraging AI in Workplace Communication	4
COM 665	Media and Strategic Communication	4
COM 675	Organizational Communication	4
COM 680	Trends in Digital and Social Media	4
COM 710	Managerial Communication	4
COM 765W	Strategic Communication	4
COM 797	Integrative Capstone: Project in Professional Communication	4
COM 798	Integrative Capstone: Project in Digital Communication Design	4
COMM 724	Senior Capstone	4
COMM 799	Honors Thesis	1-4
COMP 560	Ethics and the Law in the Digital Age	4
COMP 730	Software Development	4
COMP 790	Capstone Project	4
CRIM 725	Ethical Decision Making in the Criminal Justice System	4
CRIM 795	Integrative Capstone: Internship in Criminal Justice	4
CRIM 797	Integrative Capstone: Project in Criminal Justice	4
CRIT 501	Introduction to Critical Inquiry	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
CRIT 603	Critical Inquiry in Prior Learning Assessment	4
CS 696W	Independent Study	1-6
CS 753	Information Retrieval and Generation Systems	4
CS 760	Human-Computer Interaction	4
CS 792	Senior Project II	2
CS 799	Thesis	1-5
DS 444	Meaning of Entrepreneurship	4
DS 775	Corporate Project Experience	4
DS 799H	Honors Thesis in Decision Sciences	4
ECE 649	Embedded Microcomputer Based Design	6
ECE 653	Electronic Design III	6
ECE 791	Senior Project I	3
ECE 791H	Senior Honors Project I	4
ECE 792	Senior Project II	3
ECE 792H	Senior Honors Project II	4
ECN 410	History of Literary Economics	4
ECN 411W	Introduction to Macroeconomic Principles	4
ECN 412W	Introduction to Microeconomic Principles	4
ECN 640	Business Law and Economics	4
ECOG 701	EcoGastronomy Capstone	2-4
ECON 402H	Honors/Principles of Economics (Micro)	4
ECON 620W	Topics in Economics	4
ECON 652	Economics of Artificial Intelligence	4
ECON 653	Law and Economics	4
ECON 654	Industrial Economics and Business Innovation	4
ECON 655	Innovation in the Global Economy	4
ECON 676	Economics of Sports	4
ECON 706	Economics of Climate Change	4
ECON 720W	Economic Problems	4

ECON 725W	Independent Study	1-4
ECON 774	Senior Economics Seminar	4
ECON 775	Applied Research Skills for Economists	4
ECON 799	Honors Thesis	4-8
EDC 500	Foundations of Education	4
EDC 701	Special Education Law	4
EDC 707	Behavior Interventions for Young Children in Early Childhood/Early Childhood Special Education	4
EDC 708	Science, Technology, Engineering & Mathematics in Early Childhood and Early Childhood Spec Education	4
EDC 710	Curriculum, Assessment and Instruction in Early Childhood/Early Childhood SPED - Birth to Age 8	4
EDC 712	Observation and Assessment in Early Childhood Education	4
EDC 713	Family and Community Relations in Early Childhood Education	4
EDC 715W	Enhancing Supervision through Mentoring	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
EDC 722	Strategies for Teaching Science	4
EDC 724	Elementary School Mathematics Methods	4
EDC 731	Aspects of Mathematics Learning	4
EDC 732	Reading and Writing in the Mathematics Content Area	4
EDC 733	Middle Level Mathematics Methods	4
EDC 734	Upper Level Mathematics Methods	4
EDC 797	Practicum: Professionalism in Early Childhood Education	4
EDC 798	Culminating Teaching Experience and Seminar	4
EDUC 605	Educational Perspectives in Critical Times	4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
EDUC 733	Teaching Writing in the Elementary Grades	4
ENG 420	The Writing Process	4
ENG 450	Introduction to Literature	4
ENG 505	Introduction to Language and Linguistics	4
ENG 545	The Media and Its Messages	4
ENG 585	Short Fiction	4
ENG 590	Expository Writing	4
ENG 604	Creative Writing	4
ENG 610	War Writing in the 21st Century	4
ENG 645	Disability in Literature and Culture	4
ENGL 401	First-Year Writing	4
ENGL 401H	Honors/First-Year Writing	4
ENGL 415C	Literature and Medicine	4
ENGL 419	How to Read Anything	4
ENGL 440A	Honors/On Race in Culture and Society	4
ENGL 444D	The Irish Experience	4
ENGL 444N	Monsters!!!	4
ENGL 501	Introduction to Creative Nonfiction	4
ENGL 502	Professional and Technical Writing	4
ENGL 503	Persuasive Writing	4
ENGL 512	British Literature I Age of Heroes: Beowulf to Dr. Faustus	4
ENGL 513W	British Literature II Age of Revolutions: Shakespeare to Austen	4
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	4
ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	4
ENGL 518W	Bible as Literature	4
ENGL 526	Introduction to Fiction Writing	4
ENGL 527	Introduction to Poetry Writing	4
ENGL 550	Introduction to the Literature and Culture of Race	4
ENGL 560	Introduction to Latinx Literature and Culture	4
ENGL 581	Reading the Postcolonial Experience	4
ENGL 585	Introduction to Women in Literature	4
ENGL 595	Literary Topics	4
ENGL 602	Advanced Professional and Technical Writing	4
ENGL 610W	Digital Humanities	4
ENGL 616A	Studies in Film/Genre	4
ENGL 616B	Studies in Film/Authorship	4
ENGL 616C	Studies in Film/Culture and Ideology	4
ENGL 616D	Studies in Film/Narrative and Style	4
ENGL 621	Newswriting	4
ENGL 623	Creative Nonfiction	4
ENGL 625	Intermediate Fiction Writing Workshop	4
ENGL 625A	Intermediate Fiction Writing Workshop: Screenwriting	4
ENGL 627	Intermediate Poetry Writing Workshop	4
ENGL 631	Digital Reporting	4
ENGL 650R	I Hear America Singing: Studying American Literature and Culture	4
ENGL 655	Reading in all Directions: Comics and Graphic Narrative	4
ENGL 657	Shakespeare	4
ENGL 690	African American Literature	4
ENGL 693	Special Topics in Literature	4
ENGL 693R	Special Topics in Literature	4
ENGL 694	Special Topics in Creative Writing	4
ENGL 701	Advanced Fiction Writing Workshop	4
ENGL 703T	Travel Writing	4
ENGL 710	Teaching Writing	4
ENGL 711	Editing	4
ENGL 712	Multimedia Storytelling	4
ENGL 714	Critical Skills	4
ENGL 715	Teaching English as a Second Language: Theory and Methods	4
ENGL 716	Curriculum, Materials and Assessment in English as a Second Language	4
ENGL 718	Morphology	4
ENGL 721	Advanced Reporting	4
ENGL 722	Feature Writing	4
ENGL 725	Teaching Writing: Seminar in English Teaching	4
ENGL 726	Teaching Literature and Literacy: Seminar in English Teaching	4
ENGL 727	Issues in Second Language and Multilingual Literacy	4
ENGL 728	Language and Gender	4
ENGL 736	Environmental Theory	4
ENGL 738	Asian American Studies	4
ENGL 742	American Literature, 1815-1865	4
ENGL 751	Medieval Romance	4
ENGL 752	History of the English Language	4
ENGL 756	Chaucer	4
ENGL 758	Advanced Shakespeare	4
ENGL 759	Milton	4
ENGL 773	Literary Modernisms: Return, Revolt, Recycle	4
ENGL 777	The English Novel in the World	4
ENGL 779	Linguistic Field Methods	4
ENGL 782	Modern and Contemporary Drama	4
ENGL 784	English Novel of the 19th Century	4
ENGL 787	English Major Seminar	4
ENGL 788	Senior Honors	4
ENGL 789	Special Topics in English Teaching	4
ENGL 790	Special Topics in Linguistics	4
ENGL 791	English Grammar	4
ENGL 792	Teaching Literature and Literacy	4
ENGL 794	Syntax	4
ENGL 795	Independent Study	1-4
ENGL 797	Special Studies in Literature	4
ENGL 797R	Special Studies in Literature (Race & Racial Theories)	4
ENT 500	The Entrepreneurial Mindset	4
ESCI 530	Geological Field Methods	4
ESCI 534	Techniques in Environmental Sciences	3
ESCI 705	Principles of Hydrology	4
ESCI 726	Igneous and Metamorphic Petrology	4
ESCI 741	Geochemistry	4
ESCI 749W	Ocean Biogeochemistry	3
ESCI 756	Geotectonics	3
ESCI 759	Geological Oceanography	4
ESCI 762	Glacial Geology	4
ESCI 765	Paleoclimatology	3
ESCI 799	Senior Thesis	1-4
ET 625	Technical Communications	4
ET 751	Mechanical Engineering Technology Project	4,8
ET 791	Electrical Engineering Technology Project	4,8
EXSC 527	Scientific Foundations of Health and Fitness	4
EXSC 621	Exercise Laboratory Techniques	4
EXSC 696W	Independent Study	2-4
FIN 705	Financial Institutions	4
FIN 720W	Topics in Finance II	4
FIN 799H	Honors Thesis in Finance	4-8
FREN 503W	Intermediate French I	4

FREN 504	Intermediate French II	4
FREN 525	A Road Trip Through France: Baguette, Brie, Bordeaux, and Beyond	4
FREN 631	Advanced French: Reading and Writing	4
FREN 651	Love, War, and Power in French Literature	4
FREN 652	Greatest Hits of French	4
FREN 676	Topics in Francophone Culture	4
FREN 775	Les Mis and their World	4
FSA 605	Fire Service Ethics	4
GEN 704	Microbial Genetics and Genomics	5
GEN 711W	Genomics and Bioinformatics	0,4
GEN 713	Microbial Ecology and Evolution	4
GEN 717	Molecular Microbiology	5
GEN 772	Evolutionary Genetics of Plants	4
GEN 795W	Investigations in Genetics	1-4
GEN 799	Senior Thesis	1-4
GEN 799H	Honors Senior Thesis	1-4
GEOG 584	Place and Power: Political Geographies from Personal to Global	4
GEOG 670	Climate and Society	4
GEOG 673	From Political Ecology to Climate Justice	4
GEOG 795	Special Project	2,4
GERM 631W	Advanced Communications Skills I	4
GERM 728	Modern German Literature	4
GERM 732	Public Discourse and Current Affairs	4
GERO 500	I'm Old, So What! An introduction to aging in the United States	4
GREK 795	Special Studies	4
HDFS 630W	Youth Facing Adversity	4
HDFS 635	Teaching and Learning in Early Childhood Settings	4
HDFS 684	Curriculum for Young Children	4
HDFS 743	Families, Schools, and Community	4
HDFS 757	Race, Class, Gender, and Families	4
HDFS 760	Family Programs and Policies	4
HDFS 776	Children, Adolescents and the Law	4
HDFS 794	Families and the Law	4
HHS 697W	Professional Writing in the Health and Human Services	1-4
HIS 590	Historical Methods	4
HIS 602	History of New England	4
HIS 611	Themes in World History	4
HIS 795	Integrative Capstone: Internship in History	4
HIS 797	Integrative: Project in History	4
HIST 405W	History of Early America	4
HIST 410	Historic Survey of American Civilization	4
HIST 436W	Europe and the Modern World	4
HIST 444H	Honors/From Beijing to Baghdad: Objects along the Silk Road	4
HIST 444J	Honors/Global Citizenship: In Pursuit of Liberty	4
HIST 500	Introduction to Historical Thinking	4
HIST 505	African American History	4
HIST 509	Law in American Life	4
HIST 511	History of New Hampshire	4
HIST 532	Modern Latin America	4
HIST 566	Comparative Revolutions: How to Make a Revolution in the World before Marx	4
HIST 609	Special Topics in American Legal History	4
HIST 797	Colloquium	4
HLS 480	Professional Skills in Homeland Security	4
HLS 760	Strategic Planning and Decision Making	4
HLS 790	Capstone in Homeland Security	4
HLS 799	Senior Thesis in Homeland Security	4
HLTC 550	The Emerging U.S. Health Care System	4
HLTC 560	Health Behaviors: Theoretical Foundations for Health Education	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
HLTC 737	Informatics for Health Professionals	4
HLTC 795	Integrative Capstone: Internship in Health and Wellness	4
HLTC 797	Integrative Capstone: Project in Health Care Management	4
HLTC 798	Integrative Capstone: Project in Health and Wellness	4
HMGT 401	Introduction to the Hospitality and Tourism Industry	4
HMGT 635	Leadership and HR Management in Hospitality and Tourism	4
HMGT 681	Contemporary Resort Development and Management	4
HMGT 799	Honors Thesis/Project	4-8
HMP 742	Strategic Management for Health Care Organizations	4
HMP 746	Health Policy	4
HMP 799H	Honors Project/Research	2-4
HMSV 795	Integrative Capstone: Internship in Human Services	4
HMSV 797	Integrative Capstone: Project in Human Services	4
HPE 570	Elementary Physical Education Practicum	4
HPE 766	Middle School and Secondary Physical Education Practicum	4
HPE 781	Introduction to Adapted Physical Education	4
HRM 660	Recruitment, Selection, and Employee Development	4
HRM 740	Workplace Coaching	4
HS 717	Cultural Considerations in Health Care	4
HUMA 401W	Introduction to Humanities	4
HUMA 411	Humanities I	4
HUMA 412	Humanities II	4
HUMA 440H	Honors/Changing Our Minds: Revolutions in Thought	4
HUMA 444E	What is a Criminal?	4
HUMA 444F	Travelers in the Premodern World	4
HUMA 500	Critical Methods in the Humanities	4
HUMA 510A	Ancient Humanities: Cultures and Empires	4
HUMA 510B	Ancient Humanities: Cultures and Empires	4
HUMA 510C	Ancient Humanities: Cultures and Empires	4
HUMA 511A	Medieval Humanities: Rise of Global Empires	4
HUMA 511B	Medieval Humanities: Rise of Global Empires	4
HUMA 511C	Medieval Humanities: Rise of Global Empires	4
HUMA 512A	Modern Humanities: Colonies, Constitutions, and Capital	4
HUMA 512B	Modern Humanities: Colonies, Constitutions, and Capital	4
HUMA 512C	Modern Humanities: Colonies, Constitutions, and Capital	4
HUMA 512D	Modern Humanities: Colonies, Constitutions, and Capital	4
HUMA 513B	Global Humanities	4
HUMA 513C	Global Humanities	4
HUMA 513D	Global Humanities	4
HUMA 514A	Space, Place, & the Environment	4
HUMA 514B	Space, Place, & the Environment	4
HUMA 514C	Space, Place, & the Environment	4
HUMA 525	Humanities and the Law	4
HUMA 526	Humanities and Science	4
HUMA 527	Humanities and Religion	4
HUMA 701W	Capstone Course	4
HUMA 795	Study of Creativity	4
HUMA 796	Study of Contemporary Issues	4
HUMA 798	Research Seminar	1-2
HUMN 797	Integrative Capstone: Project in Humanities	4
IA 501	From Ideas to Evidence: Researching Global Issues	4
IA 701	Investigating the World: Seminar in International Affairs and Global Studies	4
IDIS 560	Research Methods in the Behavioral Sciences	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
IDIS 601B	Interdisciplinary Seminar: Business of Beer	4
IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	4
IDIS 797	Integrative Capstone: Project in Interdisciplinary Studies	4
INST 701	Teaching and Learning in Adulthood	4
INST 702	The Learning Workplace	4
INST 797	Program Development and Learning	4
INTR 438	A Socio-cultural Perspective on the Deaf Community	4
INTR 439	Ethics and Professional Standards for Interpreters	4
INTR 732	Simultaneous Interpretation	0,4
IT 705	Project Management for Information Technology	4
IT 760W	Human-Computer Interaction	4
IT 792	Senior Project II	2
ITAL 444A	Italians Come to America: Representing Emigration and Immigration on Both Sides of the Atlantic	4
ITAL 444B	Mamma Mia! Italian Motherhood from the Virgin Mary to Carmela Soprano	4
ITAL 503	Intermediate Italian I	4
ITAL 504	Intermediate Italian II	4
ITAL 522	Modern and Contemporary Italian Culture	4
ITAL 553	Containing Difference: Race and Identity in Contemporary Italy	4
ITAL 631	Advanced Conversation and Composition I	4
ITAL 632	Advanced Conversation and Composition II	4
ITAL 651	Introduction to Italian Culture and Civilization I: Middle Ages, Renaissance, Baroque	4

ITAL 652	Introduction to Italian Culture and Civilization II: Age of Enlightenment, Romanticism, Modernism	4
ITAL 701W	Capstone Course	4
JUST 701	Senior Seminar	4
KIN 696W	Independent Study	2-4
KIN 770W	Research Methods in Kinesiology	4
LATN 753	Advanced Studies in the Literature of the Golden Age	4
LATN 754	Advanced Studies in the Literature of the Golden Age	4
LATN 755	Advanced Studies in the Literature of the Silver Age	4
LD 600	Becoming an Effective Leader	4
LING 718	Morphology	4
LING 728	Language and Gender	4
LING 779	Linguistic Field Methods	4
LING 790	Special Topics in Linguistics Theory	4
LING 794	Syntax	4
LLC 444I	US Latinx Cities: Urban Culture, Society and Space	4
LLC 525	Topics in World Cultures	4
LLC 552	Comparative Literature: Masterpieces of World Literature II	4
LLC 560	Divine Madness and Dangerous Minds! - Mental Health in Literature and Art	4
MARI 795W	Crafting Ocean Stories: Research & Writing for the Public in Marine Science & Ocean Engineering	3
MATH 531	Mathematical Proof	4
MATH 545	Introduction to Linear Algebra	4
MATH 696W	Independent Study	1-4
MATH 739	Applied Regression Analysis	4
MATH 760	Geometry	4
MATH 761	Abstract Algebra	4
MATH 767	One-Dimensional Real Analysis	4
MATH 784	Topology	4
MATH 790	Historical Foundations of Mathematics	4
MATH 799	Senior Thesis	2-4
ME 441	Introduction to Engineering Design and Solid Modeling	0,4
ME 526	Mechanics of Materials	3
ME 561	Introduction to Materials Science	4
ME 627	Dynamics	3
ME 643	Machine Design	3
ME 646	Experimental Measurement and Data Analysis	0,4
ME 670	Systems Modeling, Simulation, and Control	4
ME 705	Thermal System Analysis and Design	4
ME 747	Experimental Measurement and Modeling of Complex Systems	0,4
ME 755	Senior Design Project I	2
ME 756	Senior Design Project II	2
ME 777	Computer Aided Engineering	4
MEFB 719W	Field Studies in Lake Ecology	4
MGMT 410	Principles of Management	4
MGMT 566	Organizational Behavior	4
MGMT 680	Global Business	4
MGMT 706	Fundraising and Resource Development	4
MGMT 795	Integrative Capstone: Industry-Based Internship	4
MGMT 797	Integrative Capstone: Industry-Based Project	4
MGMT 798	Integrative Capstone: Strategic Management Experience	4
MGT 662	Exploration in Entrepreneurial Management	4
MGT 720W	Topics in Management II	4
MGT 733	Launch Ready: The Entrepreneur's Capstone	4
MGT 755	Managing Business and People Across Borders	4
MKT 510	Principles of Marketing	4
MKT 600	Social Media Marketing	4
MKTG 720W	Topics in Marketing II	4
MKTG 753	Consumer/Buyer Behavior	4
MKTG 775	Marketing Workshop	4
MUSI 444	Music and Social Change	4
MUSI 701	Topics in Music History	3
MUSI 709W	Music of the Romantic Period	3
MUSI 711	Music of the 20th and 21st Centuries	3
MUSI 781W	Analysis: Form and Structure	3
NR 444	The New Pirates of the Caribbean	4
NR 501	Studio Soils	4
NR 602	Natural Resources and Environmental Policy	4
NR 615	Wildlife Habitats	4
NR 663	Applied Directed Research in New Zealand	4
NR 706	Soil Ecology	4
NR 708W	Environmental Economics	4
NR 720	International Environmental Politics and Policies for the 21st Century	4
NR 724	Resolving Environmental Conflicts	4
NR 740	Inventory and Monitoring of Ecological Communities	4
NR 745	Forest Management	4
NR 767W	Social Impact Assessment	4
NR 786	Leadership for Sustainability	4
NR 795W	Investigations	1-4
NR 799	Honors Senior Thesis	1-4
NSB 799H	Honors Senior Thesis	2-4
NUR 795	Integrative Capstone: Nursing Practicum	4
NURS 535	Death and Dying	4
NURS 627	Clinical Judgment in Nursing	4
NURS 648W	Nursing Honors Seminar I	1-4
NURS 732W	Nursing Leadership within Healthcare Sysems	4
NURS 748W	Nursing Honors Thesis I	1
NURS 749W	Nursing Honors Thesis II	4
NURS 794W	Special Topics	1-4
NUTR 720	Community Nutrition	4
NUTR 750	Nutritional Biochemistry	4
NUTR 780	Critical Issues in Nutrition	4
NUTR 795W	Investigations	1-4
NUTR 799H	Honors Senior Thesis	1-4
OPS 720	Fundamentals of LEAN Process Improvement	4
OT 610	Occupation, Identity, Disability	4
OT 741	Human Occupation	4
OUT 681	Foundations of Adventure Education	4
PADM 600	Public Policy Development and Implementation	4
PADM 670	Human Resources in the Public Sector	4
PAUL 725W	Independent Study	1-4
PHIL 417	God, Religion, and the Meaning of Life	4
PHIL 420	Introduction to Philosophy of Law and Justice	4
PHIL 421	Philosophy and the Arts	4
PHIL 430W	Ethics and Society	4
PHIL 436H	Honors/Social and Political Philosophy	4
PHIL 436W	Social and Political Philosophy	4
PHIL 440C	Honors/The Copernican Lens: Finding a Place for Humanity	4
PHIL 500	Workshop	4
PHIL 510	Philosophy and Feminism	4
PHIL 530	Ethics	4
PHIL 560	Philosophy Through Fiction	4
PHIL 565	Philosophy Through Film	4
PHIL 620	20th Century European Philosophy	4
PHIL 630	Neuroscience and Philosophy	4
PHIL 631	Topics in the Philosophy of Science	4
PHIL 660	Law, Medicine, and Ethics	4
PHIL 780	Special Topics	4
PHIL 795	Independent Study	1-8
PHIL 798	Senior Thesis	4
PHIL 799	Senior Thesis	4
PHYS 440A	Hon/Searching for Our Place in the Universe: Foundation and Limits of Certainty in Physical Science	4
PHYS 705	Experimental Physics II	4
PHYS 797	Senior Design Project	2
PHYS 799	Thesis	4
POL 450	American Government and Politics	4
POL 690	The US in World Affairs	4
POLT 444	Politics and Policy in a Warming World	4
POLT 444B	Cruel and Unusual in a Federal System	4
POLT 500	American Public Policy	4
POLT 507	Politics of Crime and Justice	4
POLT 508	Supreme Court and the Constitution	4
POLT 511	Women & Politics	4
POLT 523	American Political Thought	4
POLT 544	Of Dictators and Democrats	4

POLT 545	People and Politics in Asia	4
POLT 546	Wealth and Politics in Asia	4
POLT 549	The Politics of Markets	4
POLT 551	Ethnicity ,Violence, Democracy	4
POLT 552	Contemporary European Politics	4
POLT 554	Revolution and Protest in Latin America	4
POLT 556	Politics in China	4
POLT 560	World Politics	4
POLT 562	Strategy and National Security Policy	4
POLT 566	International Security in Asia	4
POLT 569	The Rise of China	4
POLT 580	Selected Topics Am Politics	4
POLT 584	Selected Topics in Political Thought	4
POLT 592	Selected Topics in International Politics	4
POLT 595	Smart Politics	4
POLT 700	Political Science Pro-Seminar	4
POLT 701	Courts and Public Policy	4
POLT 705	Elections in the United States	4
POLT 709	Reforming American Government	4
POLT 721	Feminist Political Theory	4
POLT 740	States and Societies in the Middle East	4
POLT 742	Beyond Bollywood: Politics of India & South Asia	4
POLT 748	Food and Wine Politics	4
POLT 751	Comparative Environmental Politics and Policy	4
POLT 760	Theories of International Relations	4
POLT 762	International Political Economy	4
POLT 778	International Organization	4
POLT 779	Technology and War	4
POLT 795	Advanced Study	1-4
POLT 796	Advanced Study	4
POLT 797B	Seminar in American Politics	4
POLT 797C	Seminar in Comparative Politics	4
POLT 797E	Seminar in International Politics	4
POLT 798B	Seminar in American Politics	4
POLT 799	Honors Thesis	4
PS 500	Wicked Problems: Puzzles in Public Policy	4
PS 515	New Hampshire Politics in Action	4
PS 595	Research for Political and Policy Action	4
PS 701	Senior Seminar/Internship in Public Service	4
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
PSY 797	Integrative Capstone: Project in Applied Psychology	4
PSYC 502	Research Methods in Psychology	4
PSYC 710	Visual Perception	4
PSYC 712W	Psychology of Language	4
PSYC 713W	Psychology of Consciousness	4
PSYC 715W	MindCraft: Revolutions in Thinking about Thinking	4
PSYC 720	Animal Cognition	4
PSYC 722	Behaviorism, Culture, and Contemporary Society	4
PSYC 731	Brain and Behavior	4
PSYC 733	Drugs and Behavior	4
PSYC 735	Neurobiology of Mood Disorders	4
PSYC 736	Attention Disorders	4
PSYC 741W	Special Topics	4
PSYC 755	Psychology and Law	4
PSYC 756	Psychology of Crime and Justice	4
PSYC 757	Psychology of Happiness	4
PSYC 758	Health Psychology	4
PSYC 759W	Emotion and the Embodied Mind	4
PSYC 760W	Ecopsychology	4
PSYC 761W	Sport and Performance Psychology	4
PSYC 762W	Counseling	4
PSYC 764W	Clinical Child Psychology	4
PSYC 782W	Autobiographical Memory	4
PSYC 785	Social Development	4
PSYC 791W	Special Topics	4
PTC 500	Business Communication	4
RMP 444A	Taking the "Dis" out of Disability	4
RMP 614	Assessment and Treatment Planning in Therapeutic Recreation	4
RMP 668	Youth Culture and Programs	4
RMP 724	Research, Evaluation, and Data-Driven Decisions	4
RMP 772	Law and Public Policy in Leisure Services	4
RMP 776	Human Dimensions of Natural Environments	4
RMP 796W	Independent Study	1-4
RUSS 521W	Devils, Deities, and Madness in Russian Literature	4
RUSS 632	Advanced Russian Conversation and Composition	4
RUSS 691W	Readings in Russian Literature	1-4
RUSS 797	Special Studies in Russian Language, Literature, and Culture	2,4
SC 770W	Supply Chain Management External Experience	4-8
SC 775	Supply Chain Management Project Experience	4
SCI 541	Introduction to Environmental Science	4
SCI 610	Contemporary Issues in Personal and Global Health	4
SLA 500	Role of the Speech-Language Assistant	4
SLA 506	Language Acquisition	4
SML 561W	History of American Sport and Physical Culture	4
SML 696W	Independent Study	2-4
SML 741W	Social Issues in Contemporary Sports	4
SOC 444A	Honors/Society in the Arctic	4
SOC 598	Sociological Theory	4
SOC 599	Sociological Analysis	4
SOC 601	Methods of Social Research	4
SOC 635W	Medical Sociology	4
SOC 665	Environmental Sociology	4
SOC 693	Global Change and Social Sustainability	4
SOC 697	Special Topics	4
SOC 730	Communities and the Environment	4
SOC 773	Childhood and Social Policy	4
SPAN 631	Advanced Conversation and Composition I	4
SPAN 632	Advanced Conversation and Composition II	4
SPAN 650	Hispanic Literature and Popular Culture	4
SPAN 652	Introduction to Spanish Literature and Thought	4
SPAN 654	Introduction to Latin American Literature and Thought	4
SPAN 797	Topics in Hispanic Literary and Cultural Studies	4
SUST 501	Sustainability in Action	4
SUST 750	Sustainability Capstone	4
SW 501	Research Methods in Social Work	4
SW 623	Social Work Practice: Interventions with Groups, Organizations and Communities	4
SW 625	Social Welfare Policy: Analysis, Activism, and Advocacy	4
TECH 797	Undergraduate Ocean Research Project	2
THDA 436	History of Theatre I	4
THDA 438	History of Theatre II	4
THDA 444B	Famous Dancers of the 20th Century	4
THDA 640W	Playwriting	4
THDA 721	Arts Integration	4
THDA 727	Methods of Teaching Theatre	4
THDA 795W	Independent Study	1-8
THDA 798	Senior Thesis	2
THDA 799	Capstone Project	2,4
THDA 799H	Honors/Capstone Project	4
UMST 521	Tutor Development	3
WGS 401W	Introduction to Women's Studies	4
WGS 632W	Feminist Thought	4
WGS 798W	Colloquium	4
ZOOL 613W	Animal Behavior	5
ZOOL 626W	Animal Physiology Laboratory	2
ZOOL 690W	Evolution	4
ZOOL 733W	Behavioral Ecology	0,4
ZOOL 777W	Neuroethology	3
ZOOL 799H	Honors Senior Thesis	1-4

https://www.unh.edu/student-success/university-writing-programs

General Information

The University

UNH offers more than 200 degree programs across 12 schools and colleges to more than 13,500 undergraduate and graduate students. There are thousands of courses to choose from, and 84% of classes enroll no more than 50 students, helping create a 16:1 student-to-faculty ratio that gives UNH students direct access to award-winning faculty. With three out of four undergraduates also completing at least one internship prior to graduation, experiential learning and thoughtful classroom discussions are hallmarks of the UNH experience.

The goal is to help each student become the kind of person the world most needs. And it's working: According to our most recent graduating class survey data, our graduates boast a 94% success rate, with 71.6% of students employed within 12 months after graduation and another 22.2% enrolled in further education. Additionally, the significant majority of employed graduates — 88% — reported that their job was directly or somewhat related to their major. That kind of return on investment is what led UNH to be ranked the No. 1 best value public university in New England for the fifth consecutive year in 2025, according to the Best Value Schools rankings of National Universities by U.S. News & World Report.

UNH students and faculty have been collaborating to make the world a better place for more than 150 years, and not just in the classroom — from the uncharted ocean depths to the edge of our solar system to the Earth we all share, our research transforms lives and delivers solutions to global problems. UNH is a Carnegie Classification R1 institution, putting it in the top tier of research universities nationwide. Undergraduates in every academic discipline enjoy broad access to research experiences – two out of three professors mentor undergraduates on research – and can even get funding to pursue them through the university's Hamel Center for Undergraduate Research. Many conduct independent inquiries, an experience that gives them a leg up on graduate school and employment applications. More than 1,700 students showcase their scholarship at the university's annual Undergraduate Research Conference, a week-long event each spring that is one of the nation's largest.

We know that students who graduate with hands-on, real-world experience are more likely to have successful careers, so in addition to all the classroom learning and research, UNH offers 220+ study abroad programs, a robust career and internship center and a dedicated fellowships office, all of which help students find opportunities that bolster their academic and career goals. Our entrepreneurship center helps aspiring business owners make their dreams reality, and our Hamel Honors and Scholars College, which opened in 2024, builds on the university's longstanding Honors Program to create a transformational home base for student leaders and serves as yet another differentiator for UNH as the state's flagship public university.

Academic excellence with an impact beyond the classroom. Top-ranked programs across a remarkable array of majors and disciplines. Inspiring professors who make a difference in the lives of their students. Research innovation changing the world. Prepared, successful graduates. You'll find all of that and a lot more at UNH.

More information

UNH facts and figures

Dare to Do

Research

Visit campus

Mission

The University of New Hampshire is the state's flagship public research university, providing comprehensive, high-quality undergraduate programs and graduate programs of distinction. Its primary purpose is learning: students collaborating with faculty in teaching, research, creative expression and service. UNH has a national and international agenda and holds land-grant, sea-grant and space-grant charters. From its main campus in Durham, its college in Manchester and the UNH Franklin Pierce School of Law in Concord, the university serves New Hampshire and the region through continuing education, cooperative extension, cultural outreach, economic development activities and applied research.

UNH is distinguished by its commitment to high quality undergraduate instruction, select excellence in graduate education, relatively small size, a location in a beautiful and culturally rich part of the seacoast of New England and a strong sense of responsibility for this special place, a commitment to serving the public good and our emergence over the past decade as a significant research institution. The dedication of our faculty to the highest academic standards infuses all we do with the excitement of discovery.

University System of New Hampshire Trustees and Administrative Officers

https://www.usnh.edu/trustees

The University System of New Hampshire is governed by a Board of Trustees comprising the Governor of the State, the President of the Senate, the Speaker of the House, members appointed by the Governor and Executive Council, alumni-elected members, student-elected members, the Commissioner of Education, the Commissioner of Agriculture, the presidents of the University System's colleges and universities, and the Chancellor. The Chancellor is the chief executive officer of the University System. The Board composition is stipulated by State law and is detailed in the USNH Charter, section 187- A: 13.

Academic and Support Services

Aulbani J. Beauregard Center for Equity, Justice, and Freedom

- The Beauregard Center is an inclusive student center and a welcoming space for all students.
- We offer a wide range of student support, engagement, development, and success services and programs that enhances all students' social and academic growth through partnering with students from historically excluded and underserved backgrounds and ally students.
- We facilitate our student success efforts through our Student Support and Development, Student Retention and Success, Education and Development, Programming and Engagement, and Community Engagement function areas.
- In doing so, we prepare students for a diverse, multicultural, and globalized world.

Highlights in the list of student services offered by the Beauregard Center include the CONNECT Program, non-academic advising and confidential resource advisors for disclosures of sexual misconduct, de-stressing and community-building programming (ex: ThirsTea Thursdays and Clocked Out), student employment programs (ex: Front Desk Student Employees and Interns), educational programming (ex: heritage and awareness month programming), leadership development programs (ex: Audre Lorde Summit), community engagement (ex: MLK Day of Service), and recognition programs (ex: Celebration of Excellence and Achievement).

CONNECT Program: An early-arrival residential summer program designed for students attending the Durham Campus. The program is open to all incoming first-year undergraduate students with a focus on students from historically underrepresented backgrounds, including those who are the first in their families to attend college. CONNECT participant move in early into on-campus housing, get matched with a trained and experienced peer mentor, explore student resources, and engage in interactive learning, skill building, and social activities. Program costs, including on-campus housing, meals, and activities, are covered by the University of New Hampshire.

The Beauregard Center is located in the Memorial Union Building (MUB), Suite 120, 83 Main Street, Durham, NH. Visit the Beauregard Center Website to learn more about all of our services or email us at Beauregard.Center@unh.edu or call 603-862-5204.

Career and Professional Success

Career and Professional Success (CaPS) is UNH's career services unit. We help students explore career paths, gain experiences that give them a competitive edge in the job market, find and apply for jobs and experiential learning opportunities, and build connections with employers and alumni.

Our services include:

- Individual appointments and drop-in hours for support with resumes, cover letters, interviews, LinkedIn, internship and job searches, and other career needs.
- Job and internship fairs and employer recruiting events.
- Workshops and classroom presentations on career topics.

For more information, call (603) 862-2070, email caps@unh.edu, visit the CaPS website, or follow @unhcaps on social media.

Internships

Career and Professional Success (CaPS) supports students in locating experiential learning opportunities that build professional skills and align with their academic and career interests. These opportunities may include internships, field experiences, and other career-oriented work experiences across a wide range of settings, from traditional business organizations to nonprofit, government, and community-based environments. Students may find many of these opportunities through Handshake. Students who wish to pursue experiential learning for academic credit should consult with their academic department.

For more information about internships and experiential learning opportunities at UNH, call (603) 862-2070, email caps@unh.edu, visit the CaPS website.

Center for Academic Resources

The Center for Academic Resources (CFAR) provides personalized academic-related services to undergraduate students. Professional educational counselors and student academic mentors work one-on-one coaching students on understanding UNH's academic culture, accessing and utilizing course resources, studying more effectively, and managing personal stressors impacting their academics. Students develop effective note taking and reading strategies, test preparation and taking skills, problem-solving, and organizational and time management skills. Services are easy to access through our drop-in hours, Monday through Thursday from 11am to 3pm at Smith Hall 206. Students meet with an educational counselor to hear about the program, learn tools to try immediately, and get paired to work weekly with a peer academic mentor. Study tools and course specific resources can also be found on our CFAR website. For more information call (603) 862-3698, e-mail cfar.sss@unh.edu, or visit us in Smith Hall.

Honor Societies

The University of New Hampshire has a long and strong/valued tradition of recognizing outstanding student academic achievement through election to a variety of honor societies. Some of these national societies recognize performance in any academic field while others are limited to specific disciplines.

Honor societies are most prevalent in colleges and universities. Based on varying criteria of high academic achievement and leadership, students are invited to join most commonly in their junior or senior year. Although initiated into the campus chapter, students become members of the national society for life.

Discipline Society Name, and Sash/Stole/Cord Color, UNH Contact information

Athletics

Chi Alpha Sigma, Black and Gold Cord, Joanne.Maldari@unh.edu (joanne.maldari@unh.edu)

Band

Kappa Kappa Psi, Blue and White Cord, Casey.Goodwin@unh.edu (casey.goodwin@unh.edu)

Biological Sciences

Phi Sigma, Yellow, Green and White Cord, Dr. Estelle.Hrabak@unh.edu (estelle.hrabak@unh.edu)

Business

Beta Gamma Sigma, Gold and Blue Cord, Sherri.Cannon@unh.edu

Campus-Wide

Golden Key, Blue and Gold Sash, TBA

Classics

Eta Sigma Phi, Gold and Purple Cord, Dr. Richard.Clairmont@unh.edu (richard.clairmont@unh.edu) and Dr. Scott.Smith@unh.edu (scott.smith@unh.edu)

Communications

Lambda Pi Eta, Red, White and Gold Cord, Professor Michelle.Gibbons@unh.edu

Computer Science

Upsilon Pi Epsilon, Maroon and White Cord Dr. Radim Bartos, rbartos@cs.unh.edu

Economics

Omicron Delta Epsilon, Gold and Blue Cord, Dr. Marc.Herold@unh.edu

Engineering
Tau Beta Pi, Orange and White Cord, Dr. Erin.Bell@unh.edu (erin.bell@unh.edu)

Engineering
UNH Society of Women Engineers, Green and Yellow Stole, Dr. May-Win.Thein@unh.edu (may-win.thein@unh.edu)

English
Sigma Tau Delta, Cardinal and Black Cord, Carla Cannizzaro, Carla.C@unh.edu (carla.c@unh.edu)

Fraternity/Sorority
Order of Omega, Gold and Ivory, Jamie.Silverstein@unh.edu

Health Pre-Profession
Alpha Epsilon Delta, Purple and Red Cord, Dr. Mary K. Lockwood, mkkl@unh.edu

History
Phi Alpha Theta, Red and Blue Cord, Elizabeth.Mellyn@unh.edu

Hospitality and Management
Eta Sigma Delta, Yellow, Dan.Innis@unh.edu

Justice Studies
Alpha Phi Sigma, Blue and Gold, Marion.Girard.Dorsey@unh.edu and Deborah.Briand@unh.edu

Liberal Arts
Phi Beta Kappa, Pink and Blue Cord, Dr. Susan.Siggelakis@unh.edu (susan.siggelakis@unh.edu)

Mathematics
Pi Mu Epsilon, Gold, Purple and Lilac Cord, Ellen O'Keefe, emo@cisunix.unh.edu

Natural Resources
Xi Sigma Pi, Green and White Cord, Dr. Mark.Ducey@unh.edu (mark.ducey@unh.edu)

Nursing
Sigma Theta Tau, Orchid and White, Kelly.Grady@unh.edu and Angela.Braswell@unh.edu

Political Science
Pi Sigma Alpha, Red, White and Black Cord, Dr. Susan.Siggelakis@unh.edu (susan.siggelakis@unh.edu)

Psychology
Psi Chi, Platinum and Dark Blue, Kelly.Peracchi@unh.edu

Social Work
Phi Alpha, Gold Cord, Gretchen.Bean@unh.edu (gretchen.bean@unh.edu)

Sociology
Alpha Kappa Delta, Teal Cord, Catherine.Moran@unh.edu

International Students and Scholars

The Office of International Students and Scholars (OISS) provides a wide range of services to international students, faculty, staff and exchange visitors. These services begin before the international visitors arrive on campus and often continue past the completion of their programs. OISS services include: Preparation of eligibility documents for visa issuance along with pre-arrival instructions and information; Preparation of applications to U.S. immigration offices to secure appropriate work authorization for international faculty and staff; In-depth and engaging orientation programs for new students and scholars covering a variety of issues such as immigration rights and responsibilities, adjusting to life in another culture, working in the U.S., adapting to the U.S. educational system, area attractions and services, and much more; A variety of workshops and seminars are offered covering topics such as immigration and employment and career orientation seminars; Programming and events such as, international student and scholar lunches, presentation series, graduation receptions, trips, and much more.

All international students and scholars are encouraged to maintain contact with the OISS and are required by law to report changes of address, academic program, or source of educational funds.

OISS also serves as a key liaison between international students, faculty and staff and various other UNH offices and departments. For more information visit the website or call (603) 862-1288.

Mathematics Center

The Mathematics Center (MaC) provides drop-in tutoring and support for services for students in 400-level and some 500-level Math courses. The service is free to UNH students. Come in to work on your coursework and to ask our tutors questions about your course material. Drop-in tutoring is a great place to make new friends among your classmates and to form study groups. For more information about the center visit the MaC website.

McNair Scholars Program

Congress established the Ronald E. McNair Post-Baccalaureate Achievement Program (commonly referred to as the McNair Scholars Program) in 1986 to honor the memory of Challenger astronaut and noted laser physicist Dr. Ronald E. McNair. The McNair Scholars Program is a federally funded TRIO program administered by the U.S. Department of Education. The program has been in existence at the University of New Hampshire since 1991.

The mission of the McNair Scholars Program is to prepare talented and highly motivated UNH undergraduates for entrance into graduate school and doctoral study. The program supports the next generation of faculty, researchers, and scholars by providing academic support, research opportunities, and mentoring through academic-year internships and summer research fellowships.

The UNH McNair Scholars Program serves first-generation college students with demonstrated financial need, consistent with federal TRIO program eligibility guidelines. Scholars participate in specialized programming and educational activities designed to strengthen their preparation for graduate education and doctoral study. Program participants engage in courses, seminars, and workshops focused on graduate school preparation; complete an original research project under the guidance of a faculty mentor; and have opportunities to present their research at local, regional, and national conferences.

The McNair Scholars Program office is in Hood House, Room 203, 89 Main Street, Durham, NH. For more information, please visit the McNair Scholars Program website: McNair Scholars Program website.

Military & Veteran Services

The mission of the Military & Veteran Services Office is to provide the highest quality service and support to Student Veterans, Service Members, and other military-affiliated students such as dependents, as

outlined in the Veteran Administration's Principles of Excellence and 8 Keys of Success.

We subscribe to and follow PL 113-146 Section 702, The Veterans Access, Choice and Accountability ACT of 2014.
For more information, please contact the following offices or visit the Military & Veteran Services website.

- Durham Campus - unh.veterans@unh.edu, 603-862-0643
- College of Professional Studies, Manchester and Online Divisions - veterans.cps@unh.edu, 603-641-4329

Psychological and Counseling Services

Psychological and Counseling Services (PACS) is the primary mental health facility on campus. We are fully funded by student fees. Our confidential services are designed to help students who are enrolled in full-time study to achieve their personal and academic goals. PACS utilizes a brief, solution-focused counseling model. We provide individual and group therapy, workshops, consultation, and referrals to clinicians prescribing for mental health concerns. We offer crisis counseling, during business hours, and after hours, through ProtoCall. Students needing more intensive or longer-term service are offered referrals to other university and community agencies.

We also aim to serve the community while being part of the community. As community members with specialized training in working with the university population, we are knowledgeable about the special needs of students, faculty, and staff. A large part of our community work focuses on prevention; we believe that increased awareness of healthy ways to cope with stress can help the UNH community and its individual members achieve their professional and personal goals.

All information about a student's visits to PACS is confidential and cannot be released without the written permission of the student. The University of New Hampshire Psychological and Counseling Services has been accredited by the International Association of Counseling Services since 1978.

For more information, call (603) 862-2090 or visit the PACS website.

Student Accessibility Services

Student Accessibility Services (SAS) is committed to assuring that students with disabilities receive equitable, effective, and meaningful access to all campus programs, resources, and services. SAS helps by supporting students through the accommodation process and by supporting the UNH community. Accommodations commonly include academic, housing, dining, and transportation/parking accommodations. We also assist students with Assistive Technology and accessibility related concerns.

All accommodation requests are considered through an interactive accommodations process. This consists of three important steps: (1) register with SAS, (2) submit documentation, and (3) meet with SAS. There is no deadline to register for accommodations but accommodations cannot be applied retroactively, so we encourage students to get in touch early.

If you would like to request accommodations or would like to learn more about the services offered within SAS, please contact: (603) 862-2607 (voice), 711 (TTY) or 800-735-2964 (Relay NH); (603) 862-4043 (fax); (603); e-mail SAS.office@unh.edu; or visit the SAS website.

General Information for Students with Disabilities

Accommodation Requests - Students seeking academic, housing, dining, parking/transportation or other accommodations should contact Student Accessibility Services (SAS) as soon as possible: voice (603) 862-2607; TTY Users: 711 or 800-735-2964 (Relay NH); e-mail SAS.office@unh.edu.

Housing Options - Students with disabilities who need accessible UNH housing should contact SAS as early as possible to allow for identification of appropriate accommodation(s) and notification from SAS to Housing. Please visit Accessibility & Disability Accommodations, Housing & Residential Life to learn more including information about priority housing deadlines.

Dining Options - For information about dietary restrictions, visit Nutrition, Dining. The UNH Hospitality Service Dietician can help students navigate the dining options and support access to inclusive services.

No otherwise qualified individual may be excluded from or denied access to any program, course of study, or any other offering of the University solely on the basis of a disability. Concerns regarding the institution's compliance with the Americans with Disabilities Amendments Act (ADAA) of 2008, or Section 504 of the Rehabilitation Act of 1973 should be addressed to the ADA/504 Compliance Officer in the Civil Rights & Equity Office at (603) 862-2930 (Voice/TTY).

TRIO Scholars - Student Support Services

The TRIO Scholars (SSS) program is federally funded by the United States Department of Education to increase the retention and graduation rates of program participants. Students are eligible for TRIO Scholars (SSS) if neither parent or guardians have earned a bachelor's degree, if their family income is within program guidelines, or if they have a documented disability.

TRIO Scholars program participants work with a TRIO SSS Education Coordinator to create individualized success plans focusing on academic development, financial literacy, personal development, and professional development to help translate personal goals into action. The TRIO Scholars (SSS) program also includes educational workshops, cultural events, leadership development opportunities, and access to free ongoing, comprehensive tutoring.

The TRIO Scholars (SSS) program is located on the Garden Level in Conant Hall. For more information, visit the TRIO Scholars website.

*UNH TRIO Student Support Services is funded by the US Department of Education and the University of New Hampshire. The project will be funded to serve 200 students in 2026-27.

University Advising Center

The University Advising Center provides academic advising to undeclared students in the College of Liberal Arts. The center's professional staff provides assistance to students in clarifying their interests and skills as they relate to developing a program of study at the University and declaring a major, offering opportunities to explore career possibilities.

The center is the primary academic advising resource for non-degree students and assists all students in identifying and connecting with other resources across campus.

For more information call (603) 862-2064 or visit the University Advising Center website.

University Writing Programs

The University Writing Programs (UWPs) were created to promote, support and assess writing at the University of New Hampshire. The UWPs are housed in Academic Affairs and report to the Senior Vice Provost for Academic Affairs. The UWPs are contained in a single unit that includes responsibility for the Writing Committee, Writing Across the Curriculum (WAC), and the Connors Writing Center (CWC). The curricular component of WAC, consisting of the writing-intensive (WI) courses, is situated within academic departments.

We work with academic units, departments, allied programs, individual faculty, and students to advance the culture of writing at UNH. This approach values and encourages writing as an "activity and subject of study,"[1] not only in writing intensive (WI) classes but wherever writing occurs. Through frequent guided practice, UNH students become accustomed to negotiating the writing process, are more self aware and able to transfer positive writing habits, and can adjust to differing genre conventions. We offer a wide array of services and resources to support students and faculty with their writing-based endeavors in the curriculum.

For more information call (603) 862-3272 or visit the writing program website.

[1]Adler-Kassner, Linda, and Elizabeth Wardle*, Naming What We Know: Threshold Concepts of Writing Studies*. Boulder: UP Colorado. 2015. 15. Print.

Connors Writing Center

The Connors Writing Center offers free, one-on-one writing consultation to currently-enrolled UNH students. We work with writers from all disciplines on many kinds of writing, from analysis essays to lab reports, conference proposals to dissertations. Our support is not limited to one specific type of writing or a single academic field—we collaborate with writers from across the university on a large range of writing. Typically, writers are working on projects for courses, but we also provide support to writers who are working on personal projects, statements of purpose and personal statements for graduate school, and so on.

Our 25- or 50-minute conferences are conducted in person or virtually by trained writing assistants, who are UNH undergraduate and graduate students. Students also have the option to submit their work for written feedback if they are unable to schedule one-on-one appointments.

For more information about resources and services available call (603) 862-3272 or visit the Connors Writing Center website. The Writing Center is located in Dimond Library, room 329.

Accreditation

The University of New Hampshire is accredited by the New England Commission of Higher Education (NECHE).

Accreditation of an institution of higher education by the Commission indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied though a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Commission is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the accreditation status by the Commission should be directed to the administrative staff of the institution. Individuals may also contact:

New England Commission of Higher Education (NECHE)
3 Burlington Woods Drive, Suite 100, Burlington, MA 01803-4514
(781) 425 7785
E-Mail: info@neche.org

Specialized programs of study are also accredited by various professional organizations.

Veterans and their eligible dependents may apply for educational benefits before the start of each semester. For information, contact the UNH veterans coordinator at UNH.Veterans@unh.edu or by phone at (603) 862-0643.

The University supports the efforts of secondary school officials and governing bodies to have their schools achieve accredited status to provide reliable assurance of the quality of the educational preparation of their applicants for admission.

Admissions

Durham

https://www.unh.edu/admissions-aid

UNH Durham Campus Degree Programs

UNH welcomes campus visitors year-round. In-person campus tours are led by student admissions representatives who provide a general overview of academic programs and campus life opportunities. Professional admissions staff are available to provide information about the criteria used by the admissions committee in reviewing candidates and to address specific concerns. For further information or to schedule a campus and/or group information session, visit the Admissions website. Prior registration is recommended for all in-person visits and students are limited to two guests. More information and requirements regarding the application process to UNH can be found on the Admissions website.

Admission Criteria

Admission to a bachelor's degree program is based upon successful completion of a strong secondary school program of college preparatory coursework. Primary consideration is given to the academic record, as demonstrated by the quality of the candidate's secondary school course selections, achievement in their secondary school courses and recommendation. Consideration is also given to character, initiative, leadership, and special talents. In fall 2020, UNH adopted a test-optional policy. Applicants are not be required to submit their SAT and/or ACT test scores for consideration as part of their admissions application. Due to COVID-19, NCAA Eligibility Center also implemented the test-optional policy to students recruited by our intercollegiate athletic programs.

Applicants for admission must, at a minimum, present at least four years of English, three years of mathematics (algebra I, geometry, and algebra II), two years of laboratory sciences (3 years preferred), two years of history or social science, two years of a single world language is preferred

and 2 additional full-year college preparatory courses to total 15 units. Some programs may have additional requirements for admission.

Students who plan to pursue a major in engineering, biological/physical sciences, mathematics, or forestry should present at least four years of mathematics including trigonometry, as well as laboratory coursework in chemistry and/or physics. Note that students are required to have a math and laboratory science in their senior year to be competitive for admission to a major in our College of Engineering & Physical Sciences and College of Life Sciences & Agriculture. Students pursuing business-related studies should complete four years of mathematics through their senior year, including trigonometry. For students planning to major in health-related disciplines, four years of math, as well as laboratory courses in biology and chemistry, are strongly recommended. Students interested in nursing must complete high school chemistry.

Applicants may indicate their first and second choice majors on the application for admission. An undecided applicant may apply for admission into a bachelor's program as an "undeclared" student to any one of the University's five college divisions in Durham or at UNH Manchester.

UNH students may request a change in major during their undergraduate years. While most are approved, some majors are more restrictive than others and require the completion of specific coursework and an additional application. Change of major requests are considered after a student has been at the University for at least one semester and has permission from the appropriate college dean and department chairperson.

Admission Test Requirements

Beginning fall 2020, first-year applicants have the option to submit SAT or ACT scores to be considered as a part of their admission application. Applicants are not required to submit SAT or ACT scores as part of the admissions application process at the University of New Hampshire. When submitting the admissions application, you will be asked "Would you like us to consider your standardized test scores in the admissions decision?" Please note, that once an admissions decision has been made on your application, you may not change your test score preference.

**If you enroll as a member of UNH's Class of 2027, you may be asked to submit your test scores after the May 1 deposit deadline for university research purposes only.*

International students whose primary language is not English must provide evidence of English proficiency by submitting the results of a Test of English as a Foreign Language (TOEFL), IELTS or Duolingo. The recommended minimum TOEFL score is 213 (computer version) or 550 (paper version) or 80 (Internet version). UNH also accepts the International English Language Testing System (IELTS) English Language proficiency examination in lieu of TOEFL; the minimum acceptable proficiency grade is 6.5; recommended Duolingo score is 105 or higher. International students who earn a 500 or higher on their ERBW (Evidence-Based Reading and Writing) section of the SAT will be waived the English proficiency test requirement.

Music Candidates

Candidates applying for programs in the Department of Music must make arrangements with the department chairperson for an audition. Details regarding audition requirements may be obtained from the department, or may be found on the UNH Department of Music website.

Admission Deadlines

The Office of Admissions welcomes high school students who are interested in being considered for admission to UNH as a first-year student in the fall to apply any time after August 1 at the start of their senior year. The application deadline for Early Action is November 15 and Regular Decision is February 1. Early Action applicants will receive an admissions decision prior to the end of January and Regular Decision applicants will receive an admissions decision prior to the end of March.

Students admitted to UNH are required to confirm their intention to enroll by submitting their enrollment deposit of $600 by May 1, National College Decision Day. The $600 enrollment deposit includes both the enrollment and housing fees. Undergraduate first-year and transfer students under the age of 21 are required to live on campus during their first two years.

The review of first-year candidates begins in November for those applications that are complete. A complete application includes official transcript or grade reports through the end of junior year and a confirmed senior course schedule, the results of the SAT or ACT (for students who indicate on their admissions application that they would like have their test scores included in the application review process), and a letter of recommendation. To apply as an Early Action applicant, candidates must submit and select the Early Action option on their admissions application by November 15. In some cases, the admission committee will request senior mid-year grade reports in order to make a final admission decision. Students accepted to UNH through the Early Action program are not obligated to enroll at UNH and have until May 1 to submit their enrollment deposit to reserve their space at UNH.

All offers of admission are considered conditional and are subject to the verification of satisfactory senior year achievement when final high school transcripts with a confirmed date of graduation are reviewed by the admissions committee.

Deferred Admission

Admitted students to the University may request to defer their admission for up to a year. Requests to defer admission enables students to reserve their space at the University while taking a semester or an academic year away from school for work or travel. With few exceptions, UNH will not approve deferral requests in which the student will be taking college coursework elsewhere. Requests for deferrals must be completed and submitted online using the form found on the admitted student website under the Deferral Information accordion on the bottom on of the page. The University may not be able to offer deferred admission in certain program areas.

Advanced Standing

The University recognizes outstanding secondary school work by means of advanced placement and credit for those who have taken enriched or accelerated courses before entering college. Applicants may qualify for such credit by successfully completing coursework for college credit and satisfactory achievement on University-approved placement examinations, including the College Board Advanced Placement (AP) Tests, International Baccalaureate (IB) Higher Level Examination Test Results, or through the College Level Examination Program (CLEP). Students should have official results sent directly to the Office of Admissions from the testing agency.

The University accepts AP Tests in many subject areas, with credit and course equivalency based on the score achieved. Visit the Admissions website for further information.

The University awards 8 semester credits for each IB Higher Level Examination Test Result of 5, 6, or 7. The University recognizes up to 32 semester credits of CLEP General Examination tests, which may be applied as elective credit only. Scores must be 500 or better in the humanities, natural sciences, and social sciences-history exams. The minimum score for mathematics is 500 and for the English exam with essay, 500. Subject exams, when applicable, may be used to satisfy either departmental or general education requirements. UNH does not accept all CLEP subject exams.

Maximum credit accepted toward a bachelor's degree for all credit by exam and advanced placement testing is 64 semester hours.

Associate Degree Candidacy

The University accepts candidates who have demonstrated ability and motivation for learning through academic achievement, work experience, and/or military service for associate in applied science degree programs.

Students may be considered for admission to associate in applied science degree programs offered by the University's Thompson School of Applied Science in Durham, as well as, associate in arts or science degrees at the Manchester campus. Candidates applying as high school seniors must submit the application and secondary school record. The submission of SAT and/or ACT exams are optional. Students granted first-year admission to the Thompson School are eligible to live in a University residence hall.

Eligibility for Degree Candidacy

Applicants may be candidates for any undergraduate degree offered by the University. However, applicants having a bachelor of arts (B.A.) degree will not be admitted into a program of study that awards the same degree (e.g., B.A. History and B.A. Zoology). Applicants can earn more than one bachelor of science (B.S.) degree, provided that each degree is in a different field. Applicants may also be admitted into a program awarding a different degree (e.g., B.A. History and B.S. Biology; or B.A. History and A.A.S. Applied Animal Science).

Readmission

An undergraduate who withdraws, does not register for UNH coursework in a given semester, or is suspended or dismissed from the University thereby terminates degree candidacy and must apply for readmission by the following deadlines: fall semester, June 1; spring semester, November 1. Readmission applications are processed in the Office of Admissions; however, decisions regarding readmission are made in consultation with the Division of Student and Academic Services and the dean's office of the University college division to which the student is applying.

Before seeking readmission, students on academic suspension must remain away from school for at least one semester. Students suspended for academic reasons should include a statement about their readiness to resume University work with their application.

Only under extraordinary circumstances will students be readmitted after dismissal for academic reasons. Applications submitted by dismissed students are reviewed by the University's Academic Standards and Advising Committee.

It may not be possible for readmission applicants to enroll in programs with established enrollment limitations.

Transfer Students

UNH encourages applications from transfer students. Admission consideration includes review of course selection, academic achievement, and the extent to which that selection addresses the University's general education requirements. Transfer credit is awarded for completed courses taken at an institution that is fully accredited by one of the regional accrediting associations with a grade of C- or better, provided those courses are comparable to courses offered at UNH. Each course must carry at least 3 semester credits and receive a letter grade to qualify for general education consideration.

The application deadline for fall semester admission is April 1; October 15 is the application deadline for spring semester. Some programs have enrollment limitations and may not be open to transfer students. Students enrolled in one of the University's associate degree programs who desire admission to a bachelor's degree program at UNH must apply as transfer students through the Office of Admissions.

Transfer students over the age of 21 may contact the Department of Housing at (603) 862-2120 to determine the availability of on-campus housing. Please note that on-campus housing is not guaranteed to transfer students over the age of 21.

New England Regional Student Program

The University participates in the New England Regional Student Program, in which each state college and university in New England offers certain undergraduate majors to students from other New England states. Under this program, admitted students from other New England states pay a reduced tuition rate. Students must indicate on their admissions application the specific major for which they are applying. Information about the curricula may be obtained from:

The New England Board of Higher Education
45 Temple Place
Boston, MA 02111
(617) 357-9620

Visit the Admissions website for a list of available UNH majors through this program.

Resident Status

All students attending any division of UNH in any capacity shall be charged tuition at a rate to be determined by their primary, legal domicile. Those domiciled within the state of New Hampshire pay the in-state rate. Those domiciled elsewhere pay the out-of-state rate.

Students are classified as residents or nonresidents for tuition purposes at the time of admission to the University. The decisions, made by the Office of Admissions, are based upon information furnished in students' applications and any other relevant information.

All enrolling students living in New Hampshire are required to complete an electronic NH residency statement to the effect that they, if financially independent, or their parents/guardians, if financially dependent, have been legally domiciled in New Hampshire continuously for a period of at least twelve months immediately prior to registering for the term for which the student is claiming in-state status. The electronic NH residency form can be found as a required checklist item in their application portal after they submit their admissions application to UNH. Should you have

issues accessing the NH residency form in your application portal, please contact the Office of Admissions via email at admissions@unh.edu. Students admitted from states other than New Hampshire or from foreign countries are considered nonresident throughout their attendance at the University unless they have acquired bona fide domicile in New Hampshire.

If students maintain residency apart from that of their parents/guardians, they must clearly establish that they are financially independent and that their residence in New Hampshire is for some purpose other than the temporary one of obtaining an education at the University. To qualify for in-state status, students must have been legally domiciled in New Hampshire continuously for a period of at least twelve months prior to registering for the term for which in-state status is claimed.

The burden of proof in all cases is upon the applicant. The University reserves the right to make the final decision concerning resident status for tuition purposes.

A copy of the rules governing residency may be obtained from the Office of Admissions and on the following website: https://www.usnh.edu/policy/bot/iv-financial-policies/e-classification-students-tuition-purposes-residency-rules

Manchester

manchester.unh.edu/admissions

Manchester Campus Degree Programs

First Year Students

Individuals that have never enrolled at a college or university, or have earned less than 16 credits in college coursework.

- Admissions Criteria, Application Requirements and Deadlines

Transfer Students

Individuals that have previously been enrolled at another college or university, or have earned more than 16 credits in college coursework.

- Admissions Criteria, Application Requirements and Deadlines

Additional Resources

- Application forms and deadlines
- Military & Veteran Students
- International Students
- Previously Enrolled UNH Students

CPS Online (UNH-Granite State College)

cps.unh.edu/online/apply-register

College of Professional Studies (CPS) - Online Division Degree Programs (UNH-Granite State College)

Applications to programs within CPS Online are free and reviewed on a rolling basis. Individuals can apply at any time and enroll in any term during the year.

Admission Requirements

Admission to associate and bachelor's degree programs require a high school diploma, homeschool equivalent, or GED.

Students who have earned college credit at another institution and would like it evaluated for transfer credit should complete the appropriate information on the application. Official transcripts are required for each college indicated.

Some majors offered by CPS Online have additional admissions criteria. These programs include the RN to BSN, Allied Health Leadership, Applied Studies, and Fire Service Administration. See program pages for more information on specific admissions criteria.

Additional Resources

- Military & Veteran Students
- International Students
- Transfer Credit Evaluation
- Teacher Licensure Programs

Degree Status

Inactivation and Withdrawal

CPS Online monitors the progress of degree candidates. A student who is not actively involved in learning experiences in a degree program for a period of three consecutive semesters (including summer) will be inactivated. A student may voluntarily withdraw from a degree program by notifying the College in writing. If requesting withdrawal from a degree program, a student will be considered inactive.

Reactivation/Readmission

Students who have been inactivated for a period of less than one year will complete a Request for Reactivation Form with their Academic Advisor and will be readmitted under original degree requirements, following all policies and procedures in effect at the time of inactivation.

Students requesting readmission one year or more after the date of inactivation must submit a new application.

To protect the privacy of student data, CPS Online follows a record retention schedule and transcripts from other institutions are periodically destroyed in that process. Students who return after an extended absence may be asked to resubmit official transcripts from any previously attended institutions.

States occasionally change their rules and regulations regarding professional licensure and certifications, which may affect the College's authorization in a state. Students in professional licensure or certification degree programs may not be eligible to return to active status if the College is no longer authorized to offer a program in their state.

Transfer Policy

Students with a conferred Associate Degree from a regionally accredited post-secondary institution will have their lower level General Undergraduate Education requirements waived.

Campus & Student Life

Campus Recreation

http://campusrec.unh.edu

Campus Recreation provides outstanding experiences to enhance healthy lifestyles in the UNH community. Looking to work out, play club or intramural sports, or go on an adventure through nature? Campus Recreation has a variety of programming for everyone to enjoy.

Dining Services

www.unh.edu/dining

Our national award-winning program utilizes the Guiding Stars© nutritional rating system to provide our guests with healthy food choices. Our chefs are certified through the American Culinary Federation. We have our own registered dietitian who can help with any special dietary needs. What's more, we work everyday to make sure our practices are sustainable.

Housing and Residential Life

https://www.unh.edu/housing/

College life happens on campus with numerous unique halls to call home, with a community that is friendly and welcoming. Living on campus at UNH is designed to provide fun and engaging activities, promote opportunities to meet new people and offer resources as you find your way on campus. When you choose to live on-campus you have easy access to everything happening at UNH.

Memorial Union Building & Student Activities

https://www.unh.edu/mub/student-organizations

The Memorial Union and Student Activities fosters a sense of community and inclusion at the University of New Hampshire. We provide services and facilities that enhance the quality of campus life, support the academic mission of the University, and create opportunities for student development and engagement.

New Student Programs

https://www.unh.edu/new-students/

New Student Programs provides orientation and transition programs for incoming students and their families. These programs are intended to serve as introductions to the university, its expectations, and its resources. Participating in Orientation and attending Wildcat Days will assist in laying the foundation for your experience as a Wildcat at the University of New Hampshire.

Student Senate

https://www.unh.edu/student-governance/student-senate

The Student Senate is the official voice of UNH's undergraduate student body. The Student Senate and the various offices and officials underneath it work to advocate for student concerns and to sway the Administration to act in the best interests of the Student Body. The Student Senate, autonomous of the Administration, also controls the annually collected Student Activity Fee, a mandatory fee that all undergraduate students pay to fund student activities and events. The Student Senate also must approve changes to the Student Rights, Rules, and Responsibilities, and reviews other sections of the SRRR and the Student Code of Conduct.

Transportation Services

www.unh.edu/transportation

From campus parking to the transit services that connect UNH with the surrounding communities, Transportation Services is committed to operational excellence and providing reliable service that maintains a safe environment for travelers.

University Police

www.unh.edu/upd

The nationally accredited University Police Department's mission is to support the University community in creating a safe environment that is conducive to higher education by protecting life and property while supporting the rights and dignity of all persons. Specific educational programs, including drug and alcohol abuse prevention, are provided by professionally trained police officers. Rape Aggression Defense (RAD) is taught to female students, staff, faculty, or community members, and a walking patrol provides escort services for students, faculty, and staff.

Fees and Expenses

All tuition, fee, and financial aid policies are included in the Student Right, Rules, and Responsibilities.

Important Note: In June of each year the University System of New Hampshire Board of Trustees sets tuition and fee rates for the upcoming academic year. Tuition and fees are listed on the Student Accounts website.

https://www.unh.edu/business-services/

Financial Aid

All tuition, fee, and financial aid related policies are included in the Student Right, Rules, and Responsibilities.

https://www.unh.edu/financialaid/

Health & Wellness

The University has a nationally-accredited health and wellness program.

Mission

Health & Wellness provides whole person-centered care and services, illness prevention and health promotion, co-curricular learning opportunities, and public health leadership and expertise. All are tailored to support our students' health, well-being, and personal development, the health of the campus community, and the mission of our University. Health & Wellness is accredited by the Accreditation Association for Ambulatory Health Care (AAAHC).

Health & Wellness Fee

All UNH students who take five or more credit hours/semester are required to pay the UNH Health & Wellness fee. This fee allows students to access services at Health & Wellness on campus and covers many services at no or reduced cost. When combined with a student's health insurance coverage, the Health & Wellness fee provides for a complete health care package. A student's health insurance is never billed for services covered by the UNH Health & Wellness fee.

Health Insurance

University policy requires full-time degree students that are enrolled in at least one in-person course to have health insurance as a condition of enrollment. Some students have the option of waiving this requirement if they present proof of adequate coverage; alternatively, students can acquire an affordable health benefits plan sponsored by the University: the UNH Student Health Benefits Plan (SHBP). International students with F-1 and J-1 visas are required to purchase the SHBP.
Learn more about the SHBP and the waiver process.

Health Record Requirement

Undergraduate students who have been formally accepted to a degree program are required to have health information on file with UNH Health & Wellness. The three requirements to be completed and submitted by the student online are:

1. proof of Immunization form,
2. tuberculosis questionnaire, and
3. a health history form.

Immunizations

Prior to matriculation at UNH, all students that are enrolled in at least one in-person course at UNH are required to provide proof of immunization or demonstrate their immunity to specific vaccine-preventable diseases as outlined in the Student Rights, Rules, and Responsibilities Immunization policy.

Documentation of proof of vaccination or immunity is required and is typically shown on the immunization form. It is the responsibility of students to provide the documentation before attending any classes. Any student failing to complete these requirements may be prevented from registering for future classes.

These health forms are required before moving into residence halls and starting classes. Failure to submit forms will prohibit students from registering for the next semester classes until they are compliant.

Learn more about incoming student health record requirements.

Medical Services

UNH Health & Wellness provides comprehensive, student-focused, medical care through a team approach. The clinical staff consists of board-certified physician, nurse practitioners, nurses, and medical assistants who are committed to prevention and holistic care. Medical care is provided for a variety of common concerns. Examples include respiratory illnesses (including asthma), infections, injuries, skin concerns, digestive disorders, allergy/immunization services and travel health consultation, chronic illness support, mental health, and gender-affirming care. Sexual/reproductive health services include contraceptive services, cervical cancer (Pap smears) screening/prevention, testing and treatment for sexually transmitted infections, pregnancy testing and counseling, limited sexual assault services, and more.

Students may speak by telephone with a health resource nurse for advice. On-site clinical support services include laboratory, radiology and prescription and non-prescription medication services. Not all services are available during the summer or breaks. Read more about medical services.

For emergencies and after-hours care, well-staffed and well-equipped urgent care centers and community hospitals are nearby, and an emergency ambulance service is available in Durham at all times.

Living Well Services

Living Well Services coordinates health promotion activities on campus. It is committed to helping students make lasting behavior change that supports their academic and personal growth. Their education/counseling services, prevention initiatives, and internship opportunities empower student to gain knowledge, enhancing self-awareness, and implement life-long skills and behaviors to be well and successful now and in the future. Services provided include educational programs, workshops, and classes; individual wellness counseling and coaching to promote healthy lifestyle choices. They work from a whole-person and ell-being framework with expertise in the following areas: alcohol, nicotine, cannabis and other drugs, eating concerns and body image, emotional wellness (stress, mental health), nutrition, sexual well-being, well-being and wellness. Read more about Living Well Services.

Library

The UNH Library advances the educational and research missions of the University of New Hampshire. Experienced research assistance along with group and individual instruction helps students learn how to efficiently research and critically evaluate information.

The library has over three million items, more than two million of which are electronic and accessible through the Library's website. The library's holdings are supplemented by access to the collections of Boston Library Consortium member libraries as well as library collections around the globe through interlibrary loan.

In addition to the main Dimond Library, there are two branch libraries on the Durham campus that offer customized services for the College of Engineering and Physical Sciences, and a branch library to serve the College of Professional Studies on the Manchester campus. All library locations offer wireless Internet access, computer workstations, individual study areas, and collaborative group work spaces.

For additional information about UNH Library resources, services, and expertise, please visit the library's website and for the latest Library information and news, follow us on Instagram, Facebook or LinkedIn @unhlibrary.

https://www.library.unh.edu

Professional Licensure Program Disclosures

UNH Programs and Professional Licensure Eligibility

The University of New Hampshire offers academic programs designed to prepare students for professional licensure or certification in the State of New Hampshire. Completion of a UNH program does not, by itself, guarantee eligibility for or attainment of licensure or certification. Such eligibility may be subject to additional requirements, including but not limited to professional examinations, relevant work experience, background checks, and other criteria established by licensing or certifying authorities.

UNH does not represent or guarantee that its programs satisfy licensure or certification requirements in jurisdictions outside of New Hampshire. Requirements vary by state or territory and are subject to change without notice. In compliance with applicable federal regulations, the University provides public disclosures regarding professional licensure and certification programs, regardless of instructional modality. Students are responsible for reviewing applicable requirements and are advised to consult the appropriate licensing or certification authority in the jurisdiction where they intend to seek licensure or certification.

Additional Information & Resources

State Authorization & NC-SARA

State Authorization

All States require post-secondary educational institutions to be legally authorized to provide regulated activities in their jurisdictions. Many of these State laws and regulations apply to online, distance education instruction offered in that state. As such, the University of New Hampshire and its online distance educations programs must be authorized in certain states prior to offering those programs to students located in those states.

State Regulations and NC-SARA

The U.S. Department of Education requires that any institution offering online distance education programs to students outside of its home state must acquire authorization from the states in which students reside. Regulations vary from state to state.

The University of New Hampshire (UNH) has been approved by New Hampshire to participate in the National Council for State Authorization Reciprocity Agreements (NC-SARA).

NC-SARA is a voluntary, regional approach to state oversight of post-secondary online distance education. As an institutional member of NC-SARA, UNH may offer online programming to students in other SARA member states without seeking authorization in that state.

As of April 2020, 49 states *(excluding California)*, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands have joined SARA.

UNH Online Distance Education Programs

UNH online distance education programs are available to students in each state below unless restrictions apply due to licensure/certification requirements. **If the program that you are considering is designed to lead to professional licensure or certification please refer to the Professional Licensure/Certification Programs section below for more information on whether our program meets your professional licensure requirements.**

UNH programs offered online are available to students in the following States/Territories: *Alabama, Alaska, Arizona, Arkansas, Colorado, Connecticut, Delaware, District of Columbia (D.C.), Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.*

Information for California Residents: University of New Hampshire's online distance education programs are offered to residents of California. UNH's online distance education programs are not subject to approval or exemption by the California Bureau for Private Post-secondary Education.

Professional Licensure Programs

What is a professional licensure or certification program?

A professional licensure or certification program is an academic program that is intended to (or advertised to) satisfy educational prerequisites for a State-issued professional license or certification which is required for employment in an occupation.

Professional Licensure/Certification & Online Distance Education Programs

NC-SARA does not cover professional licensing board approval for programs leading to state licensing or certification. If the online distance education program that you are considering is designed to lead to professional licensure or certification in your state, please read the information under each applicable program.

Due to certain states' restrictions and policies, UNH online distance education programs may not meet each state's full requirements. **This may result from extensive requirements for clinical placements, faculty state licensure, prior program curriculum approval and other administrative policies.**

The NC-SARA Professional Licensure Directory provides contact information for each states licensing board.

Disclosure Information & UNH Programs Leading to Professional Licensure or Certification

The University provides the program disclosure information in this catalog which indicates the States where the University has determined through reasonable, good faith effort that the professional licensure or certification program **meets** the applicable professional licensure education requirement for the State/Territory listed.

Disclosure information is included in this catalog about the program, modality the program is offered (e.g. in-person or online), credential earned, professional licensure or certification status and eligibility, and the states/territories UNH has determined that its curriculum **meets** the eligibility requirements for professional licensure or certification.

Additional Resources

UNH Professional Licensure/Certification Programs - Comprehensive Program Information Pages

The **NC-SARA Professional Licensure Directory** *provides contact information for each states licensing board.*

Additional **reference guide** *for state licensing board contact information.*

International Students

Fully online students residing outside the United States are not eligible for admission into UNH programs that lead to professional licensure and/or certification.

Student Relocation

Prospective and current students should keep in mind that licensing requirements vary by state and that relocating during the course of a program to another state could impact whether a student can continue in the program, meet the eligibility requirements of that state, and/or receive

financial aid funding. If students are considering relocating please contact the office of Educational Excellence and Effectiveness at unh.e3@unh.edu.

Student Complaints

The University is committed to supporting a positive student experience. We are ready to listen and help resolve any issues concerning licensure programs, quality of education and consumer protection.

We encourage students to reach out as outlined below with concerns or complaints.

Step 1: All Students

All students, regardless of physical location, should first seek resolution for complaints by speaking with the program director/coordinator to communicate their concerns.

For questions regarding student complaints related to licensure programs offered by UNH or SARA-related issues, please contact the office of Educational Excellence and Effectiveness at UNH.EEE@unh.edu.

General complaints & grievances

Further information about the process for handling general student complaints and grievances may be found in the Student Rights, Rules, and Responsibilities Handbook. Students may also contact the Office of the Dean of Students for advice.

Step 2: Determined by the Student's Physical Location

Located in New Hampshire: If a complaint cannot be resolved through the institution's complaint process (Step 1), students may file a complaint form with the NH Department of Education, Division of Educator Support and Higher Education.

Located outside of New Hampshire: If a complaint cannot be resolved through the institution's complaint process (Step 1), then students located in NC-SARA states, which includes all states except California, may submit complaints to State Authorization Reciprocity Agreements – New Hampshire State Portal Entity Contacts.

Additional Resources for Student Complaints

State Portal Agency Contact Information: NC-SARA provides a complete list of relevant agencies with contact information for each NC-SARA state.

Student Attestation Form

- Student Attestation Form (downloadable pdf)

Internal use: Regulatory Compliance Resources

- Glossary of Compliance Terminology
- Marketing Compliance Reference Sheet
- Regulatory Compliance Checklist
- Regulatory Compliance Training Presentation
- Student Notification Form

Student Attestation Instructions for Use

Federal regulations prohibit UNH from enrolling a student into an online professional licensure program if they reside in a state/territory where UNH does not meet the education requirements. However, if the student indicates in writing that they intend to seek licensure and employment in a state where the program does meet requirements, the student may be enrolled. The student's academic department must keep this signed form on file with the student's records for three years after graduation.

UNH Program Disclosures

UNH Programs and Professional Licensure Eligibility

Communication Sciences and Disorders (A.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Speech Language Pathology Assistant

New Hampshire Allied Health Speech Language Pathology Governing Board

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Communication Sciences and Disorders (M.S.)

Location/Delivery: Durham Campus (In-Person Program)

This program is designed to prepare graduates for professional licensure/certification as follows:

Speech-Language Pathologist

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Guam, Hawaii, Idaho, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Dakota, Northern Mariana Islands, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Early Childhood Education and Early Childhood Special Education (Additional Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Early Childhood Education and Early Childhood Special Education

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Early Childhood Education and Early Childhood Special Education (Initial Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Early Childhood Education and Early Childhood Special Education

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Early Childhood Education/Early Childhood Education and Early Childhood Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Early Childhood (N-3) and Early Childhood Special Education

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Elementary Education (Additional Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Elementary Education

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Elementary Education (M.Ed.)

Location/Delivery: Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Elementary Education

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

English Language Arts/Early Childhood Education and Early Childhood Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Early Childhood (Birth-Age 8) and Early Childhood Special Education (Birth-Age 8)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

English Language Arts/Elementary Education and General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Elementary Education (K-5 or K-8) and General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

English Language Arts/General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

General Special Education (Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

General Special Education

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

General Special Education Teacher (Additional Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

General Special Education Teacher

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

General Special Education and Elementary Education (Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

General Special Education and Elementary Education

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Health and Physical Activity Promotion Major: Health and Physical Education Teacher Licensure Option (B.S.)

Location/Delivery: College of Health and Human Services, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Health and Physical Education K-12

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Human Development and Family Studies Major: Early Childhood Education Teacher Licensure Option (B.S.)

Location/Delivery: College of Health and Human Services, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Early Childhood Education (Pre K-3)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Human Development and Family Studies: Marriage and Family Therapy (M.S.)

Location/Delivery: Durham Campus, College of Health and Human Services [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Marriage and Family Therapist

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas,

U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Life Sciences, Grades 7-12 (Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Life Sciences, Grades 7-12

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Math Studies/Elementary Education and General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Elementary Education (K-6) and General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Math Studies/General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Math Studies/Middle Level (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Mathematics (Middle Level)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Math Studies/Middle Level and General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Mathematics (Middle Level) and General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Math Studies/Mathematics Upper Level (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Mathematics (Upper Level)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Mathematics Education (B.S.)

Location/Delivery: College of Engineering and Physical Sciences, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Mathematics Middle or Upper Level

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Mathematics, Middle Level (Additional Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Mathematics, Middle Level

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Mathematics, Middle Level (Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Mathematics, Middle Level

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Mathematics, Upper Level (Additional Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Mathematics, Upper Level

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Mathematics Upper Level (Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Mathematics Upper Level

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Music Education (B.M.)

Location/Delivery: College of Liberal Arts, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Music Education K-12

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing (B.S.N.)

Location/Delivery: School of Nursing, Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Registered Nurse

National Council Licensure Examination for Registered Nurses

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alaska, American Samoa, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing: Adult Gerontology Acute Care Nurse Practitioner (M.S.)

Location/Delivery: School of Nursing [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Nurse Practitioner

American Association of Critical-Care Nurses (AACN) Certification
American Nurses Credentialing Center (ANCC) Certification

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing: Adult Gerontology Acute Care Nurse Practitioner (D.N.P.)

Location/Delivery: School of Nursing [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Nurse Practitioner
American Association of Critical-Care Nurses (AACN) Certification
American Nurses Credentialing Center (ANCC) Certification

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing: Adult Gerontology Acute Care Nurse Practitioner (Post Master's Certificate)

Location/Delivery: School of Nursing [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Nurse Practitioner
American Association of Critical-Care Nurses (AACN) Certification
American Nurses Credentialing Center (ANCC) Certification

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing: Direct Entry (M.S.)

Location/Delivery: School of Nursing [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Registered Nurse
Clinical Nurse Leader Certification
National Council Licensure Examination for Registered Nurses
American Association of Colleges of Nursing (AACN) National Clinical Nurse Leader Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing: Primary Care Family Nurse Practitioner (D.N.P)

Location/Delivery: School of Nursing [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Nurse Practitioner
American Academy of Nurse Practitioners (AANP) Certification
American Nurses Credentialing Center (ANCC) Certification

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing: Primary Care Family Nurse Practitioner (M.S.)

Location/Delivery: School of Nursing [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Nurse Practitioner:
American Academy of Nurse Practitioners (AANP) Certification
American Nurses Credentialing Center (ANCC) Certification

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in*:[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing: Primary Care Family Nurse Practitioner (Post-Master's Certificate)

Location/Delivery: School of Nursing [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Nurse Practitioner
American Academy of Nurse Practitioners (AANP) Certification
American Nurses Credentialing Center (ANCC) Certification

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing: Psychiatric Mental Health Nurse Practitioner (M.S.)

Location/Delivery: School of Nursing [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Nurse Practitioner
American Nurses Credentialing Center (ANCC) Psychiatric Mental Health Nurse Practitioner Certification Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing: Psychiatric Mental Health Nurse Practitioner (D.N.P.)

Location/Delivery: School of Nursing [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Nurse Practitioner
American Nurses Credentialing Center (ANCC) Psychiatric Mental Health Nurse Practitioner Certification Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nursing: Psychiatric Mental Health Nurse Practitioner (Post-Master's Certificate)

Location/Delivery: School of Nursing [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Nurse Practitioner
American Nurses Credentialing Center (ANCC) Psychiatric Mental Health Nurse Practitioner Certification Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Nutrition and Dietetics (M.S.)

Location/Delivery: College of Life Sciences and Agriculture, Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Registered Dietitian Nutritionist
Registered Dietitian Nutritionist (RDN) Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Occupational Therapy Advanced Standing (M.S.)

Location/Delivery: College of Health and Human Services, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Registered Occupational Therapist

National Board for Certification in Occupational Therapy Certification Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Occupational Therapy Advanced Standing (OTD)

Location/Delivery: College of Health and Human Services, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Registered Occupational Therapist

National Board for Certification in Occupational Therapy Certification Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Occupational Therapy (M.S.)

Location/Delivery: College of Health and Human Service, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Registered Occupational Therapist

National Board for Certification in Occupational Therapy Certification Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Occupational Therapy (OTD)

Location/Delivery: College of Health and Human Services, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Registered Occupational Therapist
National Board for Certification in Occupational Therapy Certification Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Reading and Writing Specialist (Additional Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Reading and Writing Specialist

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Reading and Writing Teacher (Additional Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Reading and Writing Teacher

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Recreation Management and Policy Major: Therapeutic Recreation Option (B.S.)

Location/Delivery: College of Health and Human Services, Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Certified Therapeutic Recreation Specialist
National Council for Therapeutic Recreation Certification (NCTRC) Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Recreation Management and Policy: Therapeutic Recreation Administration (M.S.)

Location/Delivery: College of Health and Human Services, Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Certified Therapeutic Recreation Specialist

National Council for Therapeutic Recreation Certification (NCTRC) Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Secondary Education (M.A.T.)

Location/Delivery: Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Areas: English Language Arts, ESOL, Health, Life Sciences, Mathematics, Music, Physical Education, Social Studies, Theatre, Visual Arts.

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Secondary Education (M.Ed.)

Location/Delivery: Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Areas: English Language Arts, ESOL, Health, Life Sciences, Mathematics, Music, Physical Education, Social Studies, Theatre, Visual Arts.

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Social Studies/Elementary Education and General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Elementary Education (K-6) and General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Social Studies (B.S.)/General Special Education (Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

General Special Education

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Theatre Major: Secondary Theatre Education Option (B.A.)

Location/Delivery: College of Liberal Arts, Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Theatre K-12

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Veterinary Technology (A.A.S.)

Location/Delivery: Thompson School of Applied Science, Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Veterinary Technician
Veterinary Technician National Examination (VTNE)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

State contact information.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

College of Engineering and Physical Sciences

Cyndee Gruden, Dean
Sharon McCrone, Associate Dean for Academic Affairs

The College of Engineering and Physical Sciences (CEPS) provides an opportunity for students to achieve educational objectives appropriate to their interests in engineering, computer science, information technology, mathematics, the physical sciences, and the teaching of mathematics and physical sciences. The college offers an education in each of its primary disciplines leading to the bachelor of science, as well as bachelor of art degrees with majors in mathematics and each of the three physical sciences. All programs include an opportunity for study in the arts, humanities, and social sciences.

The key to an undergraduate program in the college is flexibility, with a strong emphasis on personal and individualized education. In addition to specific programs, a wide range of options within several majors are available. Special programs can be developed to meet the specific interests of individual students.

Degree Requirements

MATH 425 Calculus I and MATH 426 Calculus II or the equivalent in transfer credits or advanced placement approved by the Department of Mathematics and Statistics are required by all departments of the college. The exceptions to this are the information technology major, the three computer science bachelor of arts majors, and the earth and environmental sciences bachelors of arts, which only require MATH 425 Calculus I. The prerequisites for calculus are three years of college-preparatory mathematics, including a half-year of trigonometry. Before students can register for MATH 425 Calculus I, they are required to take the Mathematics Placement Test or to have taken MATH 418 Analysis and Applications of Functions (or its equivalent) and received a grade of C or better.

Mathematics Placement

First-year students arrive with a wide range of mathematical skills based upon their high school preparation. The college wants students to have a solid mathematics foundation so that they will enjoy an enriched first-semester experience. A student's mathematics development will be assessed as part of the June orientation program. Based upon the Mathematics Placement Test, students are enrolled in the mathematics class that will allow them to continue that development. The initial mathematics entry course is MATH 418 Analysis and Applications of Functions. However, a student is placed into MATH 425 Calculus I if he or she demonstrated a certain level of proficiency in algebra and precalculus through the Mathematics Placement Test. Students with AP or dual enrollment credit for Calculus I and/or Calculus II may elect to accept those credits and continue with a math course at the next level.

Degrees OFFERED

The college offers two undergraduate degrees: the bachelor of arts and the bachelor of science. Some of the courses prescribed in these degree programs partially fulfill the University's Discovery requirements. There are entrance requirements in some programs, and it is not possible to guarantee all change-of-major requests. Students should see their advisers for specific information.

Bachelor of Arts

Programs leading to a bachelor of arts degree are offered in the departments of chemistry, computer science, earth sciences, mathematics, and physics. These programs provide a broad liberal education along with a major in one of these fields.

Bachelor of Science

The programs leading to the bachelor of science degree, offered in each of the departments of the college, emphasize students' preparation for a professional career and continuing or graduate education.

INTERDISCIPLINARY PROGRAMS

Bachelor of Science in Environmental Sciences

The Environmental Sciences program is offered jointly with the College of Life Sciences and Agriculture (COLSA).

Architectural Studies Minor

The Architectural Students Minor is managed jointly by the Civil Engineering Department, and Art & Art History Department in the College of Liberal Arts (COLA).

OTHER Combined Programs of Study

In addition to pursuing a single major, students may combine programs of study as follows:

Minors: Students may pursue one or more minors, each typically comprised of 5 courses. Minors enable students to obtain experience in a specialized area and to retain identification with their major professional area. Minors are available in nearly every discipline within the College of Engineering & Physical Sciences.

Cognates: Students may pursue one or more cognates, each typically comprised of 3 courses and intended to develop career-oriented skills. Cognates in the College of Engineering & Physical Sciences are:

- Computer Programming
- Information Technology
- Skills and Perspectives for the Digital World

Second majors: Students may choose to fulfill the requirements of two dissimilar major programs.

Dual majors: Students may choose to fulfill the requirements of a dual major, typically comprised of 8 courses. Dual majors are designated programs that must be paired with another major of any discipline.

Student-designed majors: Under special circumstances, students may design their own majors. Proposal guidelines are available in the Office of the Provost and Vice President for Academic Affairs and on the Academic Affairs website.

Dual-degrees: Students may choose to fulfill the requirements of two separate degrees, such as a B.A. and a B.S.

Accelerated Master's programs: Students with senior standing and a minimum 3.20 cumulative grade-point average are eligible to take up to 12 credits of graduate level courses prior to completing their undergraduate degree, provided they have been admitted to the Graduate School.

Special Provisions

The requirement of a given topic/course prescribed to meet the requirements of major curriculum may be waived by the faculty of a student's department. This rule offers students the opportunity to develop a somewhat individualized plan of study with intellectual incentives and opportunities in addition to those found in a regular curriculum. The student's petition must be approved by their major advisor and the dean of the college.

Undeclared

Students who are uncertain about choosing a specific major may remain undeclared in the College of Engineering & Physical Sciences during their freshman and sophomore year. All first year undeclared students in the college will take a 1-credit seminar course, TECH 400 Introduction to CEPS Programs (fall) and have the option to take TECH 402 Introduction to CEPS Career Exploration (1 cr, spring) in addition to their other required courses.

Special Programs

Research Opportunities

The talents and expertise of the faculty in all departments are reflected in the number of ongoing research projects. Undergraduates are included in many of these research projects with the intent that they will discover and foster their creative talents. When involved with a funded research project, students may have an opportunity to receive pay while learning about the research area.

The college has world-class laboratories and computer facilities in many areas. A few of these are coastal and ocean mapping, space science, environmental engineering and science, fluid dynamics, wind turbulence, information systems, materials science, nanotechnology, sustainability, and medical imaging. These and other ongoing research areas within the college are described on the college's website: https://ceps.unh.edu/research-facilities.

Students have the opportunity to acquire applied experience by working with faculty members who undertake sponsored professional projects in technical and managerial areas for business, industry, and federal, state, and local governments.

Innovation Scholars Program

The Innovation Scholars program is a research driven introduction to the university for first-year students. Students will be part of a cohort of students under the direction of a faculty member that guides them through a year-long research experience culminating in a presentation of research results at the Undergraduate Research Conference or equivalent activity. Participants will develop skills that will open doors of opportunity at UNH and more broadly, and experience the interconnectedness of UNH scholarly activity with UNH Innovation and UNH Career and Professional Success.

There are currently six research topics, including advanced manufacturing; internet engineering; ocean and environmental sensing; biomaterials; patterns and symmetry; and sustainable energy and water systems. Most cohorts work within a specific laboratory setting, including the Olson Advanced Manufacturing Center, Chase Ocean Engineering Laboratory and the UNH InterOperability Laboratory, to conduct their research. Students participating in the Innovation Scholars program will be enrolled in a 2-credit seminar both semesters of their first year for weekly cohort meetings.

Independent Study and Projects

All departments within the college offer independent study opportunities and projects. The content of these courses varies and is based upon current scientific and technological needs in addition to the interests of the student and faculty involved.

Permission of the faculty member and/or department chairperson is required. One should review the course descriptions for the independent study and project courses for specific requirements. Students interested in working with a faculty member on a project or independent study should discuss this with the faculty member and their academic adviser prior to registering for the course.

Preparing for Teaching

Degrees in mathematics education at the K-8 or secondary level are available through the department of Mathematics and Statistics.

Students interested in teaching chemistry, physics, or earth sciences should refer to the appropriate department advisors for program requirements.

Study Abroad Programs

The College of Engineering and Physical Sciences and the Global Education Center work closely to support students and their Education Abroad experience. Students interested in study abroad are recommended to meet with their CEPS Faculty Study Abroad Advisor early on to determine if any changes will need to be made to their degree plan.

For a full list of international study abroad programs available to UNH students, check out the UNH-Via website. Students interested in participating in a domestic exchange program should go to Domestic Study Programs.

To learn about additional study abroad programs available to students in the College of Engineering and Physical Sciences, contact study.abroad@unh.edu**.**

Accreditation

The baccalaureate-level programs in: Bioengineering; Chemical Engineering; Civil Engineering; Computer Engineering; Electrical Engineering; Environmental Engineering; Mechanical Engineering; and Ocean Engineering are accredited by the Engineering Accreditation Commission of ABET, Inc. The bachelor of science programs in Computer Science and Information Technology are accredited by the Computing Accreditation Commission of ABET, Inc. https://www.abet.org

The Department of Chemistry's undergraduate bachelor of science program is approved by the American Chemical Society.

https://ceps.unh.edu/

Departments

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Programs of Study

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Chemical Engineering & Bioengineering

Chemical Engineering

Chemical engineering is concerned with the analysis and design of processes that deal with the transfer and transformation of energy and material into products of high value. The practice of chemical engineering includes the conception, development, design, and application of physicochemical processes and their products; the development, design, construction, operation, control, and management of plants for these processes; and activities relating to public service, education, and research.

The curriculum prepares students for productive careers in industry or government and provides a foundation for graduate studies. The college's program emphasizes chemical engineering fundamentals while offering opportunities for focused study in Bioengineering, Energy, and Environmental Engineering.

Traditional employment areas in the chemical process industries include industrial chemicals, petroleum and petrochemicals, plastics, pharmaceuticals, metals, textiles, and food. Chemical engineers are also working in increasing numbers in the areas of energy engineering, pollution abatement, and biochemical and biomedical engineering; in addition, they are employed by many government laboratories and agencies as well as private industries and institutions.

Chemical Engineering Mission Statement

The Chemical Engineering program strives to prepare our students for productive careers in industry or government and also provides our students with a solid foundation for graduate studies. Our program emphasizes chemical engineering fundamentals while offering opportunities for focused studies in bioengineering, energy, and environmental engineering.

Chemical Engineering Program Educational Objectives

The program has the following major educational objectives with the expectation that our alumni will have successful careers in the many diverse areas of chemical engineering profession. Within a few years of obtaining a bachelor's degree in chemical engineering, we expect our graduates to have the following attributes:

(1) Depth: To be effective in applying chemical engineering principles in engineering practice or for advanced study in chemical engineering.

(2) Breadth: To have a productive career in the many diverse fields of chemical engineering such as bioengineering, energy and the environment, or in the pursuit of graduate education in disciplines such as Chemical Engineering, Medicine, Law or Business.

(3) Professionalism: To function effectively in the complex modern work environment with the ability to assume professional leadership roles.

Chemical Engineering Student Outcomes

(1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

(2) an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

(3) an ability to communicate effectively with a range of audiences.

(4) an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

(5) an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

(6) an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

(7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Bioengineering

The Bioengineering program is tailored to students who want to use engineering principles to analyze problems and design solutions in the fields of healthcare, medicine and biology. It's a truly interdisciplinary program, with courses in both the College of Engineering and Physical Sciences and the College of Life Sciences and Agriculture.#Graduates from the bioengineering program solve problems at the interface of biology and engineering in the fields of biotechnology and pharmaceuticals, as well as medicine and biofuels.

The curriculum prepares students by providing a solid foundation of biology and engineering principles through challenging courses and hands-on learning opportunities in our state-of-the-art laboratories. Our faculty have a broad background in modeling physiological and biochemical processes, enzyme kinetics, synthetic biology, biomaterials and biosensor development and related topics such as tissue engineering. Elective courses let you adapt your program to prepare for medical school, other graduate studies or careers in biomanufacturing, biotechnology or biomedical engineering.

Bioengineering Mission Statement

Our Bioengineering program empowers students with broad preparation for pursuing careers related to biotechnology, biomedical and engineering fields.

Bioengineering Program Educational Objectives

The program has the following major educational objectives with the expectation that our alumni will have successful careers in the many diverse areas of bioengineering profession. #Within a few years of obtaining a bachelor's degree in bioengineering, we expect our graduates to have the following attributes:

(1) Depth:#To be effective in applying life science concepts and bioengineering principles in engineering practice or for advanced study.

(2) Breadth: To have productive careers in the many diverse areas of bioengineering or in pursuit of graduate studies in engineering, law, medicine or business.

(3) Professionalism:#To function effectively in the complex modern work environment with the ability to assume professional leadership roles.

Bioengineering Student Outcomes

(1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

(2) an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

(3) an ability to communicate effectively with a range of audiences.

(4) an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

(5) an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

(6) an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

(7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

https://ceps.unh.edu/chemical-engineering-bioengineering

Programs

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- Chemical Engineering Major: Environmental Engineering Option (B.S.) (p. 87)

Faculty

Chemical Engineering and Bioengineering Faculty

Bioengineering Major (B.S.)

https://www.unh.edu/program/bachelor-science/bioengineering

Description

The Bioengineering program is tailored to students who want to use engineering principles to analyze problems and design solutions in the fields of healthcare, medicine and biology, biotechnology and pharmaceuticals, as well as biofuels.

The bioengineering program is truly interdisciplinary and will train graduates in biology and physiology as well as engineering. The program will provide graduates with capabilities in advanced mathematics (including differential equations and statistics), science, and engineering. Graduates will be conversant with solving problems at the interface of biology and engineering that may arise in a variety of fields. By graduation, students will have experience measuring and interpreting data from living systems and addressing the interactions between living and non-living materials.

For more information on the bioengineering program, please contact Nivedita Gupta (nivedita.gupta@unh.edu), Professor and Chair.

The Bioengineering program (B Sci in Bioengineering) is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Bioengineering and Biomedical and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students are required to obtain a minimum 2.0 grade-point average in CHBE 501 Material Balances and CHBE 502 Energy Balances and in overall standing at the end of the sophomore year in order to continue in the major. Study abroad (Exchange) students are required to have a cumulative GPA of 3.0 or better in math, physics, chemistry, and other required courses at the end of the semester prior to their exchange semester.

Code	Title	Credits
Required Courses		
CHBE 400	Chemical and Bioengineering Lectures	1

CHBE 501	Material Balances	3
CHBE 502	Energy Balances	3
CHBE 601	Fluid Mechanics and Unit Operations	3
CHBE 604	Chemical Engineering Thermodynamics	3
CHBE 614	Separation Processes	3
CHBE 761	Biochemical Engineering	4
CHBE 762	Biomedical Engineering	4
CHBE 763	Bioengineering Design I	2
CHBE 764	Bioengineering Design II	4
CHBE 766	Biomaterials	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
BMS 503	General Microbiology	3
BMS 504	General Microbiology Laboratory	2
BMS 508	Human Anatomy and Physiology II	4
CHEM 405	Chemical Principles for Engineers	4
or CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
GEN 604	Principles of Genetics	4
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 644	Statistics for Engineers and Scientists	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
Electives		
Select five courses from the following: [1]		
BMCB 753	Cell Culture	
BMS 507	Human Anatomy and Physiology I	
BMS 702	Endocrinology	
BMS 703	Infectious Disease and Health	
BMS 704	Pathologic Basis of Disease	
BMS 705	Immunology	
BMS 706 & BMS 708	Virology and Virology Laboratory	
BMS 730	Ethical Issues in Biomedical Science	
BMS 740	Human Microbiome	
CEE 502	Project Engineering [1]	
CEE 724	Environmental Engineering Microbiology [1]	
CHBE 602	Heat Transfer and Unit Operations [1]	
CHBE 603	Applied Mathematics for Chemical Engineers [1]	
CHBE 651	Biotech Experience/Biomanufacturing [1]	
CHBE 703	Mass Transfer and Stagewise Operations [1]	
CHBE 706	Electrochemical Methods: Fundamentals and Applications [1]	
CHBE 707	Chemical Engineering Kinetics [1]	
CHBE 709	Fundamentals of Air Pollution and Its Control [1]	
CHBE 712	Introduction to Nuclear Engineering [1]	
CHBE 714	Chemical Sensors [1]	
CHBE 722	Introduction to Microfluidics [1]	
CHBE 725	Cell Phenotyping and Tissue Engineering Laboratory [1]	
CHBE 735	Interfacial Engineering and Nanotechnology [1]	
CHBE 752	Process Dynamics and Control [1]	
CHBE 755	Computational Molecular Bioengineering [1]	
ECE 537	Introduction to Electrical Engineering [1]	
ECE 541	Electric Circuits [1]	
ECE 543	Introduction to Digital Systems [1]	
ECE 633	Signals and Systems I [1]	
ECE 633H	Honors/Signals and Systems I [1]	
ECE 717	Introduction to Digital Image Processing [1]	
ECE 784	Biomedical Instrumentation [1]	
GEN 711	Genomics and Bioinformatics	
or GEN 711W	Genomics and Bioinformatics	
GEN 712	Programming for Bioinformatics	
GEN 717	Molecular Microbiology	
GEN 771	Molecular Genetics	
TECH 750	Intellectual Asset Management for Engineers and Scientists	
TECH 780	Intellectual Property Law for Engineers & Scientists	
Total Credits		**85**

[1] At least four of the elective courses must be engineering.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CHBE 400	Chemical and Bioengineering Lectures	1
CHEM 405	Chemical Principles for Engineers [2]	4
ENGL 401	First-Year Writing [3]	4
MATH 425	Calculus I [1]	4
Discovery Program Elective		4
	Credits	**17**
Spring		
BIOL 411	Introductory Biology: Molecular and Cellular [4]	4
MATH 426	Calculus II	4
PHYS 407	General Physics I	4
Discovery Program Elective		4
	Credits	**16**
Second Year		
Fall		
CHBE 501	Material Balances	3
CHEM 545	Organic Chemistry	3
CHEM 546	Organic Chemistry Laboratory	2
GEN 604	Principles of Genetics	4
MATH 527	Differential Equations with Linear Algebra	4
	Credits	**16**
Spring		
BMS 503	General Microbiology	3
BMS 504	General Microbiology Laboratory	2
CHBE 502	Energy Balances [5]	3
MATH 644	Statistics for Engineers and Scientists	4
Discovery Program Elective		4
	Credits	**16**
Third Year		
Fall		
BMCB 658	General Biochemistry	3
BMCB 659	General Biochemistry Lab	2
CHBE 601	Fluid Mechanics and Unit Operations	3
CHBE 766	Biomaterials	4
Bioengineering Program Elective		4
	Credits	**16**

Spring		
BMS 508	Human Anatomy and Physiology II	4
CHBE 604	Chemical Engineering Thermodynamics	3
CHBE 761	Biochemical Engineering	4
Bioengineering Program Elective		4
	Credits	**15**
Fourth Year		
Fall		
CHBE 762	Biomedical Engineering	4
CHBE 763	Bioengineering Design I	2
Bioengineering Program Electives (2)		8
Discovery Program Elective		4
	Credits	**18**
Spring		
CHBE 614	Separation Processes	3
CHBE 764	Bioengineering Design II	4
Bioengineering Program Elective		4
Discovery Program Elective		4
	Credits	**15**
	Total Credits	**129**

[1] MATH 425 Calculus I satisfies the Discovery Foundation Quantitative Reasoning category.
[2] CHEM 405 Chemical Principles for Engineers satisfies the Discovery Physical Science (with lab) category.
[3] ENGL 401 First-Year Writing satisfies the Discovery Foundation Writing Skills category.
[4] BIOL 411 Introductory Biology: Molecular and Cellular satisfies the Discovery Biological Science (with lab) category.
[5] CHBE 502 Energy Balances satisfies the Discovery Inquiry category.

The Discovery ETS category requirement is met upon receiving a passing grade in CHBE 400 Chemical and Bioengineering Lectures; CHBE 761 Biochemical Engineering; CHBE 762 Biomedical Engineering; CHBE 763 Bioengineering Design I; CHBE 764 Bioengineering Design II. Students who do not complete these courses must take a Discovery ETS course to fulfill the requirement.

Student Learning Outcomes

Program Learning Outcomes

By the time of graduation, students will have:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Chemical Engineering Major (B.S.)

https://www.unh.edu/program/bachelor-science/chemical-engineering

Description

Chemical engineering is concerned with the analysis and design of processes that deal with the transfer and transformation of energy and material. The practice of chemical engineering includes the conception, development, design, and application of physicochemical processes and their products; the development, design, construction, operation, control, and management of plants for these processes; and activities relating to public service, education, and research.

The curriculum prepares students for productive careers in industry or government and provides a foundation for graduate studies. The program emphasizes chemical engineering fundamentals while offering opportunities for focused study in bioengineering, energy or environmental engineering.

Traditional employment areas in the chemical process industries include industrial chemicals, petroleum and petrochemicals, plastics, pharmaceuticals, metals, textiles, and food. Chemical engineers also are working in increasing numbers in the areas of energy engineering, pollution abatement, and biochemical and biomedical engineering; in addition, they are employed by many government laboratories and agencies as well as private industries and institutions.

Graduates from the program have the ability to apply knowledge of mathematics, science, and engineering to identify, formulate, and solve chemical engineering problems as well as to design and conduct experiments safely and analyze and interpret data. They are prepared to pursue advanced studies in chemical engineering. Program graduates gain a sense of professional and ethical responsibility with the ability to apply environmental, safety, economic, and ethical criteria in the design of engineering processes. They learn to function as individuals or in a team and gain skills in written and oral communication and effectively use computers for engineering practice, including information search in the library and online. They also understand the need for lifelong learning and the significance of societal and global issues relevant to chemical engineering.

The Chemical Engineering program (B Sci in Chemical Engineering) is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Chemical, Biochemical, Biomolecular and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 129 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A minimum of 129 credits is required for graduation with the degree of bachelor of science in chemical engineering. There are nine electives in the chemical engineering curriculum. Six of these are for the Discovery Program requirements. The remaining three electives are chemical engineering electives.

Students are required to obtain a minimum 2.0 grade-point average in CHBE 501 Material Balances and CHBE 502 Energy Balances and in overall standing at the end of the sophomore year in order to continue in the major. Study abroad (Exchange) chemical engineering students are required to have a cumulative GPA of 3.0 or better in math, physics, chemistry, and CHBE courses at the end of the semester prior to their exchange semester.

Code	Title	Credits
Required Courses		
CHBE 400	Chemical and Bioengineering Lectures	1
CHBE 501	Material Balances	3
CHBE 502	Energy Balances	3
CHBE 601	Fluid Mechanics and Unit Operations	3
CHBE 602	Heat Transfer and Unit Operations	3
CHBE 603	Applied Mathematics for Chemical Engineers	4
CHBE 604	Chemical Engineering Thermodynamics	3
CHBE 612	Chemical Engineering Laboratory I	3
CHBE 614	Separation Processes	3
CHBE 703	Mass Transfer and Stagewise Operations	3
CHBE 707	Chemical Engineering Kinetics	3
CHBE 708	Chemical Engineering Design	4
CHBE 713	Chemical Engineering Laboratory II	3
CHBE 752	Process Dynamics and Control	4
CHEM 405	Chemical Principles for Engineers	4
or CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	
CHEM 651	Organic Chemistry I	3
CHEM 652A	Organic Chemistry II	3
or CHEM 652	Organic Chemistry II	
CHEM 653	Organic Chemistry Laboratory	2
CHEM 683	Physical Chemistry I	3
CHEM 684	Physical Chemistry II	3
CHEM 685	Physical Chemistry Laboratory	2
CHEM 686	Physical Chemistry Laboratory	2
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 644	Statistics for Engineers and Scientists	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	

Code	Title	Credits
Elective Courses		
Select three courses from the following:		
CHBE 651	Biotech Experience/Biomanufacturing	
CHBE 705	Fossil Fuels and Renewable Energy Sources	
CHBE 706	Electrochemical Methods: Fundamentals and Applications	
CHBE 709	Fundamentals of Air Pollution and Its Control	
CHBE 712	Introduction to Nuclear Engineering	
CHBE 714	Chemical Sensors	
CHBE 722	Introduction to Microfluidics	
CHBE 735	Interfacial Engineering and Nanotechnology	
CHBE 744	Corrosion	
CHBE 755	Computational Molecular Bioengineering	
CHBE 761	Biochemical Engineering	
CHBE 762	Biomedical Engineering	
CHBE 766	Biomaterials	

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CHBE 400	Chemical and Bioengineering Lectures	1
CHEM 405	Chemical Principles for Engineers [3]	4
ENGL 401	First-Year Writing [1]	4
MATH 425	Calculus I [2]	4
Discovery Program Electives [6]		4
	Credits	**17**
Spring		
MATH 426	Calculus II	4
PHYS 407	General Physics I [3]	4
Discovery Program Electives (2) [6]		8
	Credits	**16**
Second Year		
Fall		
CHBE 501	Material Balances	3
CHEM 683	Physical Chemistry I	3
CHEM 685	Physical Chemistry Laboratory	2
MATH 527	Differential Equations with Linear Algebra	4
PHYS 408	General Physics II	4
	Credits	**16**
Spring		
CHBE 502	Energy Balances [4]	3
CHEM 684	Physical Chemistry II	3
CHEM 686	Physical Chemistry Laboratory	2
MATH 740 or MATH 644	Design of Experiments I [6] or Statistics for Engineers and Scientists	4

Discovery Program Elective [6]		4
	Credits	**16**
Third Year		
Fall		
CHBE 601	Fluid Mechanics and Unit Operations	3
CHBE 603	Applied Mathematics for Chemical Engineers	4
CHEM 651	Organic Chemistry I	3
CHEM 653	Organic Chemistry Laboratory	2
Chemical Engineering Elective		4
	Credits	**16**
Spring		
CHBE 602	Heat Transfer and Unit Operations	3
CHBE 604	Chemical Engineering Thermodynamics	3
CHBE 612	Chemical Engineering Laboratory I	3
CHEM 652A	Organic Chemistry II	3
Discovery Program Elective [6]		4
	Credits	**16**
Fourth Year		
Fall		
CHBE 703	Mass Transfer and Stagewise Operations	3
CHBE 707	Chemical Engineering Kinetics	3
CHBE 713	Chemical Engineering Laboratory II	3
CHBE 752	Process Dynamics and Control	4
Chemical Engineering Elective		4
	Credits	**17**
Spring		
CHBE 614	Separation Processes	3
CHBE 708	Chemical Engineering Design [5]	4
Chemical Engineering Elective		4
Discovery Elective [6]		4
	Credits	**15**
	Total Credits	**129**

1. ENGL 401 First-Year Writing satisfies the Discovery Foundation Writing Skills category.
2. MATH 425 Calculus I satisifies the Discovery Foundation Quantitative Reasoning category.
3. PHYS 407 General Physics I or CHEM 405 Chemical Principles for Engineers satisfies the Discovery Physical Science (with lab) category.
4. CHBE 502 Energy Balances satisfies the Discovery Inquiry requirement.
5. CHBE#708 Chemical Engineering Design satisfies the Discovery Capstone Experience/Course.
6. Chemical Engineering students do not have to take a course in the Discovery ETS category since they satisfy this requirement through a combination of courses in the curriculum.

Student Learning Outcomes

Program Learning Outcomes

By the time of graduation, students will have:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Chemical Engineering Major: Bioengineering Option (B.S.)

https://www.unh.edu/program/bachelor-science/chemical-engineering-bioengineering

Description

Under this option, the required courses deal with the application of basic biological sciences and chemical engineering principles to the design and operation of large-scale bioprocesses for the production of high-value medicinal, food and beverage, pharmaceutical, biomedical, genetic engineering, and health care products. The elective courses permit the student to study topics of special interest in more depth or gain a broader perspective in bioengineering or some closely related subjects such as biochemistry or biotechnology experience in manufacturing or research. Three courses are required, and an additional course of at least three credits should be selected from the electives list. Students interested in the bioengineering option should declare their intention to the department faculty during the sophomore year.

The Chemical Engineering program (B Sci in Chemical Engineering) is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Chemical, Biochemical, Biomolecular and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 132 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
CHBE 400	Chemical and Bioengineering Lectures	1
CHBE 501	Material Balances	3
CHBE 502	Energy Balances	3
CHBE 601	Fluid Mechanics and Unit Operations	3
CHBE 602	Heat Transfer and Unit Operations	3
CHBE 603	Applied Mathematics for Chemical Engineers	4
CHBE 604	Chemical Engineering Thermodynamics	3
CHBE 612	Chemical Engineering Laboratory I	3
CHBE 614	Separation Processes	3
CHBE 651	Biotech Experience/Biomanufacturing	4
CHBE 703	Mass Transfer and Stagewise Operations	3
CHBE 707	Chemical Engineering Kinetics	3
CHBE 708	Chemical Engineering Design	4
CHBE 713	Chemical Engineering Laboratory II	3
CHBE 752	Process Dynamics and Control	4
CHBE 761	Biochemical Engineering	4
CHBE 766	Biomaterials	4
CHEM 405	Chemical Principles for Engineers	4
or CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	
CHEM 683	Physical Chemistry I	3
CHEM 684	Physical Chemistry II	3
CHEM 685	Physical Chemistry Laboratory	2
CHEM 686	Physical Chemistry Laboratory	2
CHEM 651	Organic Chemistry I	3
CHEM 652A	Organic Chemistry II	3
or CHEM 652	Organic Chemistry II	
CHEM 653	Organic Chemistry Laboratory	2
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 644	Statistics for Engineers and Scientists	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
Elective Courses		
Select one of the following:		3-4
CHBE 695	Chemical Engineering Project	
CHBE 696	Independent Study	
CHBE 706	Electrochemical Methods: Fundamentals and Applications	
CHBE 714	Chemical Sensors	
CHBE 722	Introduction to Microfluidics	
CHBE 725	Cell Phenotyping and Tissue Engineering Laboratory	
CHBE 735	Interfacial Engineering and Nanotechnology	
CHBE 755	Computational Molecular Bioengineering	
CHBE 762	Biomedical Engineering	
BMCB 750		
BMCB 751	Principles of Biochemistry I	
BMCB 752	Principles of Biochemistry II	
Total Credits		**104-105**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CHBE 400	Chemical and Bioengineering Lectures	1
CHEM 405	Chemical Principles for Engineers [3]	4
ENGL 401	First-Year Writing [1]	4
MATH 425	Calculus I [2]	4
Discovery Program Electives [6]		4
	Credits	**17**
Spring		
MATH 426	Calculus II	4
PHYS 407	General Physics I [3]	4
Discovery Program Electives (2) [6]		8
	Credits	**16**
Second Year		
Fall		
CHBE 501	Material Balances	3
CHEM 683	Physical Chemistry I	3
CHEM 685	Physical Chemistry Laboratory	2
MATH 527	Differential Equations with Linear Algebra	4
PHYS 408	General Physics II	4
	Credits	**16**
Spring		
CHBE 502	Energy Balances [4]	3
CHEM 684	Physical Chemistry II	3
CHEM 686	Physical Chemistry Laboratory	2
MATH 740 or MATH 644	Design of Experiments I [6] or Statistics for Engineers and Scientists	4
Discovery Program Elective [6]		4
	Credits	**16**
Third Year		
Fall		
CHBE 601	Fluid Mechanics and Unit Operations	3
CHBE 603	Applied Mathematics for Chemical Engineers	4
CHEM 651	Organic Chemistry I	3
CHEM 653	Organic Chemistry Laboratory	2
CHBE 766	Biomaterials	4
	Credits	**16**
Spring		
CHBE 602	Heat Transfer and Unit Operations	3
CHBE 604	Chemical Engineering Thermodynamics	3
CHBE 612	Chemical Engineering Laboratory I	3
CHEM 652A	Organic Chemistry II	3
CHBE 761	Biochemical Engineering	4
	Credits	**16**

Fourth Year		
Fall		
CHBE 703	Mass Transfer and Stagewise Operations	3
CHBE 707	Chemical Engineering Kinetics	3
CHBE 713	Chemical Engineering Laboratory II	3
CHBE 752	Process Dynamics and Control	4
Discovery Elective [6]		4
	Credits	**17**
Spring		
CHBE 614	Separation Processes	3
CHBE 708	Chemical Engineering Design [5]	4
CHBE 651	Biotech Experience/Biomanufacturing	4
Bioengineering Option Elective		3-4
Discovery Elective [6]		4
	Credits	**18-19**
	Total Credits	**132-133**

1. ENGL 401 First-Year Writing satisfies the Discovery Foundation Writing Skills category.
2. MATH 425 Calculus I satisifies the Discovery Foundation Quantitative Reasoning category.
3. PHYS 407 General Physics I or CHEM 405 Chemical Principles for Engineers satisfies the Discovery Physical Science (with lab) category.
4. CHBE 502 Energy Balances satisfies the Discovery Inquiry requirement.
5. CHBE#708 Chemical Engineering Design satisfies the Discovery Capstone Experience/Course.
6. Chemical Engineering students do not have to take a course in the Discovery ETS category since they satisfy this requirement through a combination of courses in the curriculum.

Student Learning Outcomes

Program Learning Outcomes

By the time of graduation, students will have:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Chemical Engineering Major: Energy Option (B.S.)

https://www.unh.edu/program/bachelor-science/chemical-engineering-energy

Description

This option covers the major areas of current interest in the energy field. The required courses provide students with a general background knowledge of fossil fuels, nuclear power, solar energy, and other alternative energy resources. The elective courses will permit the student to study topics of special interest in more depth or gain a broader perspective on energy and some closely related subjects. Three courses are required, and one additional course of at least three credits should be selected from the electives list. Students interested in the energy option should declare their intention to the department faculty during the sophomore year.

The Chemical Engineering program (B Sci in Chemical Engineering) is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Chemical, Biochemical, Biomolecular and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 132 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
CHBE 400	Chemical and Bioengineering Lectures	1
CHBE 501	Material Balances	3
CHBE 502	Energy Balances	3
CHBE 601	Fluid Mechanics and Unit Operations	3
CHBE 602	Heat Transfer and Unit Operations	3
CHBE 603	Applied Mathematics for Chemical Engineers	4
CHBE 604	Chemical Engineering Thermodynamics	3
CHBE 612	Chemical Engineering Laboratory I	3
CHBE 614	Separation Processes	3
CHBE 703	Mass Transfer and Stagewise Operations	3
CHBE 705	Fossil Fuels and Renewable Energy Sources	4
CHBE 706	Electrochemical Methods: Fundamentals and Applications	4
CHBE 707	Chemical Engineering Kinetics	3
CHBE 708	Chemical Engineering Design	4
CHBE 712	Introduction to Nuclear Engineering	4
CHBE 713	Chemical Engineering Laboratory II	3
CHBE 752	Process Dynamics and Control	4
CHEM 405	Chemical Principles for Engineers	4

or CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	
CHEM 683	Physical Chemistry I	3
CHEM 684	Physical Chemistry II	3
CHEM 685	Physical Chemistry Laboratory	2
CHEM 686	Physical Chemistry Laboratory	2
CHEM 651	Organic Chemistry I	3
CHEM 652A	Organic Chemistry II	3
or CHEM 652	Organic Chemistry II	
CHEM 653	Organic Chemistry Laboratory	2
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 644	Statistics for Engineers and Scientists	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
Elective Courses		
Select one of the following:		3-4
CHBE 695	Chemical Engineering Project	
CHBE 696	Independent Study	
CHBE 709	Fundamentals of Air Pollution and Its Control	
CHBE 714	Chemical Sensors	
CHBE 722	Introduction to Microfluidics	
CHBE 735	Interfacial Engineering and Nanotechnology	
CHBE 744	Corrosion	
CHBE 761	Biochemical Engineering	
ME 705	Thermal System Analysis and Design	
ME 706	Renewable Energy: Physical and Engineering Principles	
NR 606	International Energy Topics	
NR 787	Advanced Topics in Sustainable Energy	
Total Credits		**104-105**

[1] This requires approval of the department; students should check with their advisor. Courses offered in the past include Renewable Electrical Power, Renewable Energy, and Peak Oil.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CHBE 400	Chemical and Bioengineering Lectures	1
CHEM 405	Chemical Principles for Engineers [3]	4
ENGL 401	First-Year Writing [1]	4
MATH 425	Calculus I [2]	4
Discovery Program Electives [6]		4
	Credits	**17**
Spring		
MATH 426	Calculus II	4
PHYS 407	General Physics I [3]	4
Discovery Program Electives (2) [6]		8
	Credits	**16**
Second Year		
Fall		
CHBE 501	Material Balances	3
CHEM 683	Physical Chemistry I	3
CHEM 685	Physical Chemistry Laboratory	2
MATH 527	Differential Equations with Linear Algebra	4
PHYS 408	General Physics II	4
	Credits	**16**
Spring		
CHBE 502	Energy Balances [4]	3
CHEM 684	Physical Chemistry II	3
CHEM 686	Physical Chemistry Laboratory	2
MATH 740 or MATH 644	Design of Experiments I [6] or Statistics for Engineers and Scientists	4
Discovery Program Elective [6]		4
	Credits	**16**
Third Year		
Fall		
CHBE 601	Fluid Mechanics and Unit Operations	3
CHBE 603	Applied Mathematics for Chemical Engineers	4
CHEM 651	Organic Chemistry I	3
CHEM 653	Organic Chemistry Laboratory	2
CHBE 705	Fossil Fuels and Renewable Energy Sources	4
	Credits	**16**
Spring		
CHBE 602	Heat Transfer and Unit Operations	3
CHBE 604	Chemical Engineering Thermodynamics	3
CHBE 612	Chemical Engineering Laboratory I	3
CHEM 652A	Organic Chemistry II	3
Discovery Program Elective [6]		4
	Credits	**16**
Fourth Year		
Fall		
CHBE 703	Mass Transfer and Stagewise Operations	3
CHBE 707	Chemical Engineering Kinetics	3
CHBE 713	Chemical Engineering Laboratory II	3
CHBE 752	Process Dynamics and Control	4
CHBE 706	Electrochemical Methods: Fundamentals and Applications	4
	Credits	**17**
Spring		
CHBE 614	Separation Processes	3
CHBE 708	Chemical Engineering Design [5]	4
CHBE 712	Introduction to Nuclear Engineering	4
Energy Option Elective		3-4
Discovery Elective [6]		4
	Credits	**18-19**
	Total Credits	**132-133**

[1] ENGL 401 First-Year Writing satisfies the Discovery Foundation Writing Skills category.
[2] MATH 425 Calculus I satisifies the Discovery Foundation Quantitative Reasoning category.
[3] PHYS 407 General Physics I or CHEM 405 Chemical Principles for Engineers satisfies the Discovery Physical Science (with lab) category.
[4] CHBE 502 Energy Balances satisfies the Discovery Inquiry requirement.
[5] CHBE#708 Chemical Engineering Design satisfies the Discovery Capstone Experience/Course.
[6] Chemical Engineering students do not have to take a course in the Discovery ETS category since they satisfy this requirement through a combination of courses in the curriculum.

Student Learning Outcomes

Program Learning Outcomes

By the time of graduation, students will have:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Chemical Engineering Major: Environmental Engineering Option (B.S.)

https://www.unh.edu/program/bachelor-science/chemical-engineering-environmental-engineering

Description

The chemical engineering program, with its substantial requirements in chemistry, fluid dynamics, heat transfer, mass transfer, unit operations, and reaction kinetics, provides students with a unique preparation to deal with many aspects of environmental pollution problems. The option gives students a special focus on the application of chemical engineering principles and processes to the solution of problems relating to air pollution, water pollution, and the disposal of solid and hazardous waste. Three required courses must be selected, plus one elective from the electives list. Each course must carry a minimum of three credits.

Students interested in the environmental engineering option should declare their intention to the department faculty during the sophomore year.

The Chemical Engineering program (B Sci in Chemical Engineering) is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Chemical, Biochemical, Biomolecular and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 132 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
CHBE 400	Chemical and Bioengineering Lectures	1
CHBE 501	Material Balances	3
CHBE 502	Energy Balances	3
CHBE 601	Fluid Mechanics and Unit Operations	3
CHBE 602	Heat Transfer and Unit Operations	3
CHBE 603	Applied Mathematics for Chemical Engineers	4
CHBE 604	Chemical Engineering Thermodynamics	3
CHBE 612	Chemical Engineering Laboratory I	3
CHBE 614	Separation Processes	3
CHBE 703	Mass Transfer and Stagewise Operations	3
CHBE 707	Chemical Engineering Kinetics	3
CHBE 708	Chemical Engineering Design	4
CHBE 709	Fundamentals of Air Pollution and Its Control	4
CHBE 713	Chemical Engineering Laboratory II	3
CHBE 752	Process Dynamics and Control	4
CHEM 405	Chemical Principles for Engineers	4
or CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	
CHEM 683	Physical Chemistry I	3
CHEM 684	Physical Chemistry II	3
CHEM 685	Physical Chemistry Laboratory	2
CHEM 686	Physical Chemistry Laboratory	2
CHEM 651	Organic Chemistry I	3
CHEM 652A	Organic Chemistry II	3
or CHEM 652	Organic Chemistry II	
CHEM 653	Organic Chemistry Laboratory	2
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 644	Statistics for Engineers and Scientists	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4

or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
CEE 720	Waste Management and Site Remediation	3
ESCI 654	Fate and Transport in the Environment	4
Elective Courses		
Select one of the following:		3-4
CHBE 695	Chemical Engineering Project	
CHBE 696	Independent Study	
CHBE 705	Fossil Fuels and Renewable Energy Sources	
CHBE 706	Electrochemical Methods: Fundamentals and Applications	
CHBE 714	Chemical Sensors	
CHBE 722	Introduction to Microfluidics	
CHBE 735	Interfacial Engineering and Nanotechnology	
CHBE 744	Corrosion	
CEE 706	Environmental Life Cycle Assessment	
CEE 723	Environmental Engineering Chemistry	
CEE 724	Environmental Engineering Microbiology	
CEE 731	Advanced Water Treatment Processes	
Total Credits		**103-104**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CHBE 400	Chemical and Bioengineering Lectures	1
CHEM 405	Chemical Principles for Engineers [3]	4
ENGL 401	First-Year Writing [1]	4
MATH 425	Calculus I [2]	4
Discovery Program Electives [6]		4
	Credits	**17**
Spring		
MATH 426	Calculus II	4
PHYS 407	General Physics I [3]	4
Discovery Program Electives (2) [6]		8
	Credits	**16**
Second Year		
Fall		
CHBE 501	Material Balances	3
CHEM 683	Physical Chemistry I	3
CHEM 685	Physical Chemistry Laboratory	2
MATH 527	Differential Equations with Linear Algebra	4
PHYS 408	General Physics II	4
	Credits	**16**
Spring		
CHBE 502	Energy Balances [4]	3
CHEM 684	Physical Chemistry II	3
CHEM 686	Physical Chemistry Laboratory	2
MATH 740 or MATH 644	Design of Experiments I [6] or Statistics for Engineers and Scientists	4
Discovery Program Elective [6]		4
	Credits	**16**
Third Year		
Fall		
CHBE 601	Fluid Mechanics and Unit Operations	3
CHBE 603	Applied Mathematics for Chemical Engineers	4
CHEM 651	Organic Chemistry I	3
CHEM 653	Organic Chemistry Laboratory	2
CEE 720	Waste Management and Site Remediation	3
	Credits	**15**
Spring		
CHBE 602	Heat Transfer and Unit Operations	3
CHBE 604	Chemical Engineering Thermodynamics	3
CHBE 612	Chemical Engineering Laboratory I	3
CHEM 652A	Organic Chemistry II	3
Discovery Program Elective [6]		4
	Credits	**16**
Fourth Year		
Fall		
CHBE 703	Mass Transfer and Stagewise Operations	3
CHBE 707	Chemical Engineering Kinetics	3
CHBE 713	Chemical Engineering Laboratory II	3
CHBE 752	Process Dynamics and Control	4
CHBE 709	Fundamentals of Air Pollution and Its Control	4
	Credits	**17**
Spring		
CHBE 614	Separation Processes	3
CHBE 708	Chemical Engineering Design [5]	4
ESCI 654	Fate and Transport in the Environment	4
Environmental Engineering Option Elective		3-4
	Credits	**14-15**
	Total Credits	**127-128**

1. ENGL 401 First-Year Writing satisfies the Discovery Foundation Writing Skills category.
2. MATH 425 Calculus I satisifies the Discovery Foundation Quantitative Reasoning category.
3. PHYS 407 General Physics I or CHEM 405 Chemical Principles for Engineers satisfies the Discovery Physical Science (with lab) category.
4. CHBE 502 Energy Balances satisfies the Discovery Inquiry requirement.
5. CHBE#708 Chemical Engineering Design satisfies the Discovery Capstone Experience/Course.
6. Chemical Engineering students do not have to take a course in the Discovery ETS category since they satisfy this requirement through a combination of courses in the curriculum.

Student Learning Outcomes

Program Learning Outcomes

By the time of graduation, students will have:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Chemistry

Chemistry is a dynamic, an extremely creative, and yet also a practical discipline. Chemists *analyze* and *quantitate*, like when testing environmental or forensic samples; they *measure* specific characteristics of substances, like the defects present in a material, or the optical properties of atmospheric particles; they *design* and *synthesize* new substances, like antibiotics, catalysts for hydrogen production, and polymers for flexible electronics; they also generate *models* and *theories* that can explain what happens in the laboratory or in Nature. Chemistry is integral to modern science and, ultimately, most phenomena in biology, engineering, environmental science, geology, materials science, and medicine can be described in terms of the chemical and physical behavior of atoms and molecules—because of this, chemistry is often called "The Central Science". Chemists are vital members of the interdisciplinary teams tackling the complicated problems facing our world, including issues in energy, health, security, and defense. Chemists are essential in developing the technologies and materials that support modern life!

The study of chemistry provides students with the critical thinking and problem-solving skills necessary to be successful in a wide variety of careers. You'll find chemists in many industries, including agricultural/food products, biotechnology, coatings, materials, paper, personal care products, petrochemicals, pharmaceuticals, plastics, renewable energy, semiconductors, and solar cells. Chemists are also involved in environmental and health-related sciences, making public policies, patent law and intellectual property, and educating future generations of scientists.

Students are also well-prepared for graduate-level work in chemistry, chemical biology, chemical physics, biochemistry, biophysics, materials chemistry, and other related fields. Students who excel in undergraduate chemistry coursework are often able to obtain funding for their graduate work through teaching or research assistantships and fellowships. Chemistry majors have also been successful in a variety of professional programs where they have studied medicine, pharmacy, dentistry, veterinary medicine, business, or law.

The chemistry program at The University of New Hampshire is small enough to be personal, but broad enough to provide excellent opportunities for challenge and growth. Students interested in pursuing chemistry as an undergraduate degree have three options available to them. These are the Bachelor of Science in Chemistry (B.S.) degree, Bachelor of Science in Chemistry: Chemical Biology option (B.S.) degree, and a Bachelor of Arts (B.A.) degree. The B.S. degrees are certified by the American Chemical Society; the B.A. degree may also lead to ACS certification, depending on program plan. Since the required courses for each degree program are very similar in the first and second years, it is easy to change from one program to another. A chemistry faculty advisor is assigned to a student once they enter the program. The student's advisor provides academic guidance concerning the choice of courses to meet both major and university requirements.

https://ceps.unh.edu/chemistry

Programs

- Chemistry Major (B.A.) (p. 89)
- Chemistry Major (B.S.) (p. 91)
- Chemistry Major: Chemical Biology Option (B.S.) (p. 93)
- Chemistry Minor (p. 94)

Faculty

Chemistry Department Faculty

Chemistry Major (B.A.)

https://www.unh.edu/program/bachelor-arts/chemistry

Description

The B.A. degree exposes students to the major fields of chemistry but provides more flexibility in course selection than the B.S. degree. The curriculum offers a comprehensive introduction to chemistry's traditional subdisciplines (analytical, inorganic, organic, and physical chemistry) via foundational classroom and laboratory experiences. Undergraduate research is an option, but not a requirement for this degree. The B.A. degree is directed towards students who have interdisciplinary interests and are not planning to either attend a traditional graduate program in chemistry or find immediate employment in the chemical industry. Instead, this degree is geared toward students who plan to attend graduate school in an interdisciplinary field where chemical knowledge will be beneficial, and students who are interested in chemistry but plan to pursue post-graduate degrees in the health sciences, education, business, or other pre-professional programs. With careful selection of elective courses, the B.A. degree may also lead to American Chemical Society certification.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
CHEM 400	Freshman Seminar	1
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 517 & CHEM 518	Introduction to Chemical Measurement Science and Practical Chemical Measurement Techniques and Instrumentation	5
CHEM 547 & CHEM 549	Organic Chemistry I and Organic Chemistry Laboratory	5
CHEM 548 & CHEM 550	Organic Chemistry II and Organic Chemistry Laboratory	5
CHEM 574 & CHEM 576	Chemistry Across the Periodic Table and Experimental Inorganic Chemistry	6
CHEM 683 & CHEM 685	Physical Chemistry I and Physical Chemistry Laboratory	5
CHEM 684 & CHEM 686	Physical Chemistry II and Physical Chemistry Laboratory	5
CHEM 762 & CHEM 763	Advanced Chemical Analysis Instrumentation and Advanced Chemical Instrumentation Laboratory	5
CHEM 798	Senior Seminar [1]	1
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
or PHYS 401 & PHYS 402	Introduction to Physics I and Introduction to Physics II	
Total Credits		**58**

[1] CHEM 798 Senior Seminar satisfies the Discovery Capstone experience requirement. Students work with the instructor to prepare presentations based on a research project or chemistry-related professional engagement. This is a Writing Intensive course.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year

Fall		**Credits**
CHEM 400	Freshman Seminar	1
CHEM 403	General Chemistry I	4
MATH 425	Calculus I	4
ENGL 401	First-Year Writing	4
Discovery Course		4
	Credits	**17**
Spring		
CHEM 404	General Chemistry II	4
MATH 426	Calculus II	4
PHYS 407	General Physics I	4
Discovery Course		4
	Credits	**16**

Second Year

Fall		
CHEM 517	Introduction to Chemical Measurement Science	3
CHEM 518	Practical Chemical Measurement Techniques and Instrumentation	2
CHEM 547	Organic Chemistry I	3
CHEM 549	Organic Chemistry Laboratory	2
Language 1 (first semester of an elementary foreign language sequence)		4
The B.A. requires either 2 semesters of elementary foreign language or 1 semester of intermediate (or higher).		
Elective Course		4
	Credits	**18**
Spring		
CHEM 548	Organic Chemistry II	3
CHEM 550	Organic Chemistry Laboratory	2
CHEM 574	Chemistry Across the Periodic Table	4
CHEM 576	Experimental Inorganic Chemistry	2
Language 2 (second semester of an elementary foreign language sequence)		4
Elective Course		3
	Credits	**18**
Third Year		
Fall		
CHEM 683	Physical Chemistry I	3
CHEM 685	Physical Chemistry Laboratory	2
Discovery Course		4
Discovery Course		4
Elective Course		3
	Credits	**16**
Spring		
CHEM 684	Physical Chemistry II	3
CHEM 686	Physical Chemistry Laboratory	2
CHEM 762	Advanced Chemical Analysis Instrumentation	3
CHEM 763	Advanced Chemical Instrumentation Laboratory	2
Discovery Course		4
	Credits	**14**
Fourth Year		
Fall		
Advanced Chemistry Elective Course		4
Discovery Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
CHEM 798	Senior Seminar	1
Discovery		4
Elective Course		4

Elective Course	4
Credits	**13**
Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

At the time of graduation, a student should be able to:

- Reason with Chemistry's anchoring concepts: that matter consists of atoms that have internal structures that dictate their chemical and physical behavior; that atoms interact via electrostatic forces to form chemical bonds that chemical compounds have geometric structures that influence their chemical and physical behaviors; that intermolecular forces—electrostatic forces between molecules—dictate the physical behavior of matter; that matter changes, forming products that have new chemical and physical properties that energy is the key currency of chemical reactions in molecular scale systems as well as macroscopic systems; that chemical changes have a time scale over which they occur; that all chemical changes are, in principle, reversible, and chemical processes often reach a state of dynamic equilibrium; that Chemistry is generally advanced via experimental observations; and that Chemistry constructs meaning interchangeably at the particulate and macroscopic levels.
- Use Chemistry's cross-cutting concepts to interrogate and explain phenomena: chemical identity (how do we identify chemical substances?); structure-property relationships (how do we predict the properties of materials?); chemical causality (why do chemical processes occur?); chemical mechanism (how do chemical processes occur?); chemical control (how can we control chemical processes?); benefits-costs-risks (how do we evaluate the impacts of chemically transforming matter?)
- Demonstrate the following general scientific practices when displaying knowledge of chemical ideas and concepts: asking questions; developing and using models; constructing explanations; planning and carrying out investigations; engaging in argument from evidence; analyzing and interpreting data; using mathematics and computational thinking; obtaining, evaluating, and communicating information OR Demonstrate the following Chemistry core practices when displaying knowledge of chemical ideas and concepts (a) analysis: development and application of strategies for detecting, identifying, separating, and quantifying chemical substances (b)synthesis: the design of new substances and synthetic routes (c)transformation: controlling chemical processes for non-synthetic purposes.

Chemistry Major (B.S.)

https://www.unh.edu/program/bachelor-science/chemistry

Description

The B.S. Chemistry degree is certified by the American Chemical Society and provides a deep, rigorous experience that prepares students for graduate work or a career in chemical industry and related fields. The curriculum offers thorough training in the major fields of chemistry, covering analytical, inorganic, organic, and physical chemistry, as well as biochemistry and chemical biology. Students gain laboratory experience in molecular synthesis and characterization, chemical biology, analytical and instrumental methods, physical chemical measurements and data analysis, and spectroscopy. At the same time, the program requires students to participate in scientific inquiry, via both advanced laboratory experiences and independent research.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
CHEM 400	Freshman Seminar	1
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 517 & CHEM 518	Introduction to Chemical Measurement Science and Practical Chemical Measurement Techniques and Instrumentation	5
CHEM 547 & CHEM 549	Organic Chemistry I and Organic Chemistry Laboratory	5
CHEM 548 & CHEM 550	Organic Chemistry II and Organic Chemistry Laboratory	5
CHEM 574 & CHEM 576	Chemistry Across the Periodic Table and Experimental Inorganic Chemistry	6
CHEM 683 & CHEM 685	Physical Chemistry I and Physical Chemistry Laboratory	5
CHEM 684 & CHEM 686	Physical Chemistry II and Physical Chemistry Laboratory	5
CHEM 740	Chemical Biology	4
CHEM 755	Advanced Organic Chemistry	3
CHEM 762 & CHEM 763	Advanced Chemical Analysis Instrumentation and Advanced Chemical Instrumentation Laboratory	5
CHEM 774	Inorganic Chemistry	3
CHEM 777	Advanced Synthesis and Characterization	3
CHEM 798	Senior Seminar	1
CHEM 799	Senior Thesis [2]	8
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
Total Credits		**83**

1. CHEM 740 Chemical Biology and BMCB 658 General Biochemistry each satisfy the Discovery Biological Sciences requirement (BS Chemistry majors only).
2. CHEM 799 Senior Thesis is a year-long experience of 4 credits per semester and satisfies the Discovery Capstone Experience requirement.

[3] CHEM 740 Chemical Biology meets the ACS BIOCHEM requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CHEM 400	Freshman Seminar	1
CHEM 403	General Chemistry I	4
MATH 425	Calculus I	4
PHYS 407	General Physics I	4
Discovery Course		4
	Credits	**17**
Spring		
CHEM 404	General Chemistry II	4
MATH 426	Calculus II	4
ENGL 401	First-Year Writing	4
PHYS 408	General Physics II	4
	Credits	**16**
Second Year		
Fall		
CHEM 517	Introduction to Chemical Measurement Science	3
CHEM 518	Practical Chemical Measurement Techniques and Instrumentation	2
CHEM 547	Organic Chemistry I	3
CHEM 549	Organic Chemistry Laboratory	2
Discovery Course		4
	Credits	**14**
Spring		
CHEM 548	Organic Chemistry II	3
CHEM 550	Organic Chemistry Laboratory	2
CHEM 574	Chemistry Across the Periodic Table	4
CHEM 576	Experimental Inorganic Chemistry	2
Discovery Course		4
	Credits	**15**
Third Year		
Fall		
CHEM 683	Physical Chemistry I	3
CHEM 685	Physical Chemistry Laboratory	2
CHEM 774	Inorganic Chemistry	3
CHEM 777	Advanced Synthesis and Characterization	3
Discovery Course		4
	Credits	**15**
Spring		
CHEM 684	Physical Chemistry II	3
CHEM 686	Physical Chemistry Laboratory	2
CHEM 762	Advanced Chemical Analysis Instrumentation	3
CHEM 763	Advanced Chemical Instrumentation Laboratory	2
Discovery Course		4
Elective Course		2
	Credits	**16**
Fourth Year		
Fall		
CHEM 799	Senior Thesis (first semester of a yearlong experience)	4
CHEM 740	Chemical Biology	4
CHEM 755	Advanced Organic Chemistry	3
Advanced Chemistry Elective		3
Elective Course		4
	Credits	**18**
Spring		
CHEM 798	Senior Seminar	1
CHEM 799	Senior Thesis	4
Discovery Course		4
Elective Course		4
Elective Course		4
	Credits	**17**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

- Reason with Chemistry's anchoring concepts: that matter consists of atoms that have internal structures that dictate their chemical and physical behavior; that atoms interact via electrostatic forces to form chemical bonds that chemical compounds have geometric structures that influence their chemical and physical behaviors; that intermolecular forces—electrostatic forces between molecules—dictate the physical behavior of matter; that matter changes, forming products that have new chemical and physical properties that energy is the key currency of chemical reactions in molecular scale systems as well as macroscopic systems; that chemical changes have a time scale over which they occur; that all chemical changes are, in principle, reversible, and chemical processes often reach a state of dynamic equilibrium; that Chemistry is generally advanced via experimental observations; and that Chemistry constructs meaning interchangeably at the particulate and macroscopic levels.
- Use Chemistry's cross-cutting concepts to interrogate and explain phenomena: chemical identity (how do we identify chemical substances?); structure-property relationships (how do we predict the properties of materials?); chemical causality (why do chemical processes occur?); chemical mechanism (how do chemical processes occur?); chemical control (how can we control chemical processes?); benefits-costs-risks (how do we evaluate the impacts of chemically transforming matter?).
- Demonstrate the following general scientific practices when displaying knowledge of chemical ideas and concepts: asking questions; developing and using models; constructing explanations; planning and carrying out investigations; engaging in argument from evidence; analyzing and interpreting data; using mathematics and computational thinking; obtaining, evaluating, and communicating

information OR demonstrate the following Chemistry core practices when displaying knowledge of chemical ideas and concepts (a) analysis: development and application of strategies for detecting, identifying, separating, and quantifying chemical substances (b)synthesis: the design of new substances and synthetic routes (c)transformation: controlling chemical processes for non-synthetic purposes.

Chemistry Major: Chemical Biology Option (B.S.)

https://www.unh.edu/program/bachelor-science/chemistry-chemical-biology

Description

Chemical Biology is the interdisciplinary study of the chemicals and chemical reactions involved in biological processes, incorporating the disciplines of chemistry, biochemistry, cell biology, and pharmacology. In contrast to biochemistry which is the study of biomolecules within and between cells, chemical biology is concerned with using chemical principles to probe, manipulate, and control biological systems in vitro and in vivo.

The Chemical Biology major option will prepare students for a world where molecular behavior and design are increasingly important for drug design, tissue engineering, biologically based materials, and agriculture. The program also is excellent foundation for pre-professional (e.g. pre-med, pre-dentistry, pre-pharmacy) students.

The option is available as a set of electives drawn from current course offerings in Chemistry, Chemical Engineering, Bioengineering, Biomedical Science, and Biochemistry, Molecular, and Cellular Biology. This BS degree option fulfils the requirements for certification by the American Chemical Society.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Chemistry Core Courses		
CHEM 400	Freshman Seminar	1
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 547 & CHEM 549	Organic Chemistry I and Organic Chemistry Laboratory	5
CHEM 548 & CHEM 550	Organic Chemistry II and Organic Chemistry Laboratory	5
CHEM 517	Introduction to Chemical Measurement Science	3
CHEM 574	Chemistry Across the Periodic Table	4
CHEM 683	Physical Chemistry I	3
or CHEM 684	Physical Chemistry II	
Advanced Chemistry Labs		
Select two courses from the following:		4
CHEM 518	Practical Chemical Measurement Techniques and Instrumentation	
CHEM 576	Experimental Inorganic Chemistry	
CHEM 685	Physical Chemistry Laboratory	
or CHEM 686	Physical Chemistry Laboratory	
Math and Physics Core Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
Chemical Biology Option Requirements		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BMCB 751	Principles of Biochemistry I	4
BMCB 752	Principles of Biochemistry II	4
CHEM 740	Chemical Biology	3
CHEM 741	Chemical Biology Laboratory	4
Chemical Biology Electives		
Select three courses from the following for a minimum of 10 credits:		
BIOL 528	Applied Biostatistics I	4
or MATH 644	Statistics for Engineers and Scientists	
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BMCB 605	Principles of Cell Biology	4
BMCB 754	Molecular Biology Research Methods	5
BMCB 755	Protein Biochemistry Laboratory	5
BMCB 760	Pharmacology	4
BMCB 763	Biochemistry of Cancer	4
BMCB 794	Protein Structure and Function	4
CHBE 725	Cell Phenotyping and Tissue Engineering Laboratory	4
CHBE 761	Biochemical Engineering	4
CHBE 766	Biomaterials	4
CHEM 684	Physical Chemistry II	3
CHEM 708	Spectroscopic Investigations of Organic Molecules	3
CHEM 755	Advanced Organic Chemistry	3
CHEM 762 & CHEM 763	Advanced Chemical Analysis Instrumentation and Advanced Chemical Instrumentation Laboratory	5
CHEM 777	Advanced Synthesis and Characterization	3
GEN 604	Principles of Genetics	4
Capstone		
CHEM 798	Senior Seminar	1
CHEM 799	Senior Thesis	8
or BMCB 795	Investigations in Molecular and Cellular Biology	

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year

Fall		Credits
CHEM 400	Freshman Seminar	1
CHEM 403	General Chemistry I	4

MATH 425	Calculus I	4
Discovery Course		4
	Credits	**13**
Spring		
ENGL 401	First-Year Writing	4
CHEM 404	General Chemistry II	4
MATH 426	Calculus II	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
	Credits	**16**
Second Year		
Fall		
CHEM 517	Introduction to Chemical Measurement Science	3
CHEM 547 & CHEM 549	Organic Chemistry I and Organic Chemistry Laboratory	5
PHYS 407	General Physics I	4
Elective Course		4
	Credits	**16**
Spring		
CHEM 548 & CHEM 550	Organic Chemistry II and Organic Chemistry Laboratory	5
CHEM 574	Chemistry Across the Periodic Table	4
Advanced Chemistry Lab		2
PHYS 408	General Physics II	4
	Credits	**15**
Third Year		
Fall		
CHEM 683	Physical Chemistry I	3
Advanced Chemistry Lab		2
CHEM 740	Chemical Biology	3
BMCB 751	Principles of Biochemistry I	4
Discovery Course		4
	Credits	**16**
Spring		
CHEM 741	Chemical Biology Laboratory	4
BMCB 752	Principles of Biochemistry II	4
Chemical Biology Elective		3-5
Discovery Course		4
	Credits	**15-17**
Fourth Year		
Fall		
CHEM 799 or BMCB 795	Senior Thesis or Investigations in Molecular and Cellular Biology	4
Chemical Biology Elective		3-5
Discovery Course		4
Discovery Course		4
	Credits	**15-17**
Spring		
CHEM 798	Senior Seminar	1
CHEM 799 or BMCB 795	Senior Thesis or Investigations in Molecular and Cellular Biology	4
Chemical Biology Elective		3-5
Discovery Course		4
Elective Course		4
	Credits	**16-18**
	Total Credits	**122-128**

Student Learning Outcomes

Program Learning Outcomes

- Recognize that matter consists of atoms that have internal structures that dictate their chemical and physical behavior.
- Recognize that atoms interact via electrostatic forces to form chemical bonds.
- Recognize that chemical compounds have geometric structures that influence their chemical and physical behaviors.
- Recognize that intermolecular forces—electrostatic forces between molecules—dictate the physical behavior of matter.
- Recognize that matter changes, forming products that have new chemical and physical properties
- Recognize that energy is the key currency of chemical reactions in molecular scale systems as well as macroscopic systems.
- Recognize that chemical changes have a time scale over which they occur.
- Recognize that all chemical changes are, in principle, reversible, and chemical processes often reach a state of dynamic equilibrium.
- Recognize that chemistry is generally advanced via experimental observations.
- Recognize that chemistry constructs meaning interchangeably at the particulate and macroscopic levels.
- Employ the concept of chemical identity (how do we identify chemical substances?).
- Employ structure-property relationships (how do we predict the properties of materials?).
- Employ chemical causality (why do chemical processes occur?).
- Employ chemical mechanism (how do chemical processes occur?).
- Employ chemical control (how can we control chemical processes?).
- Employ benefits-costs-risks (how do we evaluate the impacts of chemically transforming matter?).
- Demonstrate ability to ask questions.
- Develop and use models.
- Construct explanations.
- Plan and carry out investigations.
- Engage in argument from evidence.
- Analyze and interpret data.
- Demonstrate mathematical and computational thinking.
- Obtain, evaluate, and communicate information.

Chemistry Minor

https://www.unh.edu/program/minor/chemistry

Description

In this minor, you'll be introduced to the study of chemistry, providing you with the communication, critical-thinking and problem-solving skills

necessary for success in many careers. The chemistry program offers a wide selection of courses in analytical, inorganic, organic and physical chemistry. You'll have the opportunity to participate in a variety of rigorous laboratory experiences and cutting-edge research. Combine the chemistry minor with a major such as business, education, engineering or a health-related field to enhance your options for a career or graduate studies.

If you are interested in completing the Chemistry Minor, please contact Prof. Stacey Hughes, Undergraduate Coordinator, Chemistry Department at Stacey.Hughes@unh.edu. She will review your coursework and discuss your plans to minor in Chemistry.

Requirements

Academic policies related to Minors.

Minor Requirements

1. Complete a total of 20 credit hours in Chemistry (CHEM) courses.
2. A minimum of 12 credit hours at the 500 level or higher are required.
3. Chemistry courses for the minor cannot be completed on a pass/fail basis.
4. Grade of C- or better is required in all chemistry minor coursework.
5. A cumulative GPA of 2.00 is required for all chemistry minor coursework.
6. Biochemistry (BMCB) courses do not count toward a chemistry minor.
7. Transfer credits can only be applied to the minor with permission of the Chemistry Department Undergraduate Coordinator or Chair. Maximum of 8 transfer credit hours. Transfer courses must meet minimum grade requirements.
8. The following courses cannot be counted toward the Chemistry minor: CHEM 400, CHEM 408, CHEM 409, CHEM 411, CHEM 413, CHEM 501, CHEM 502, CHEM 503 and CHEM 798.

Civil and Environmental Engineering

https://ceps.unh.edu/civil-environmental-engineering

Overview

Civil and Environmental Engineering involves the sustainable planning, design, and construction of public works for the benefit of society while minimizing environmental impact. Civil Engineering concerns the design of buildings, bridges, roads, dams, water transmission systems, water treatment systems, tunnels, and more. Environmental Engineering specializes in environmental cleanup, drinking water systems, wastewater treatment systems, and solid and hazardous waste disposal systems, environmental remediation, all with consideration of people, planet, and profits - known as the triple bottom line. Resulting infrastructure facilities must provide efficient service, be cost effective, and be compatible with the environment. Moreover, civil and environmental engineers work under a code of ethics in which their primary, overriding responsibility, is to uphold the public's trust by working to plan, design, build, and restore safe, sustainable, and environmentally responsible public works.

As civil engineering is such a broad field, it is traditionally divided into sub-disciplines. At the University of New Hampshire, multiple courses are offered in six: materials engineering, environmental engineering, geotechnical engineering, structural engineering, sustainable engineering, and water resources engineering.

Environmental engineering focuses on environmental pollution and public health protection; water, wastewater, reuse and stormwater technology; solid and hazardous waste engineering and remediation; engineering sustainability; environmental microbiology and chemistry; contaminant transport and fate, hydraulics, and hydrology.

Students may readily transfer between the BSCIVE and BSENVE programs within the first three semesters. Transferring between the two programs is also possible later on in the programs, but additional courses may result.

Both engineering degrees provide a firm base in mathematics and engineering, and all majors are expected to develop excellent communication and computer skills. Graduates are prepared to enter the profession and to pursue advanced study. Because of the broad technical background attained, some graduates also successfully pursue further education in business, architecture, education, and law.

Mission

The mission of the Department of Civil and Environmental Engineering at the University of New Hampshire is fourfold:

- To pursue and disseminate knowledge through teaching, scholarship, outreach and public service.
- To provide excellent undergraduate and graduate education.
- To advance the state-of-the-art in science and engineering by conducting research.
- To enhance the quality of life for people in New Hampshire, New England, and beyond.

BSCIVE Program Overview

Civil engineers work as private consultants, for large contracting firms, and for government agencies in a wide variety of indoor and outdoor settings around the world. There is a strong and constant market for civil engineers due to the demands placed on the profession to design, construct, maintain, and repair the infrastructure.

Educational Objectives

In accordance with its University, College, and Department missions, the faculty of the Department of Civil & Environmental Engineering has established clear educational objectives for our BSCIVE graduates, five years after obtaining the degree:

1. Professional employment, primarily in the civil and environmental engineering disciplines.
2. Commitment to continuous learning through graduate and post-graduate education, coursework, and research.
3. Being resourceful in finding solutions, and retaining ownership and accountability for their work.
4. Positions of leadership, directing the work of others.
5. Professional licensure or certification in civil and environmental engineering disciplines and other professions.
6. Positions and active participation in community, public, and professional service.

Student Outcomes

To enable our graduates to achieve our educational objectives, the BSCIVE program is designed to provide the following student outcomes at the time of graduation:

1. To have obtained an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. To have obtained an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. To have obtained an ability to communicate effectively with a range of audiences.
4. To have obtained an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. To have obtained an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. To have obtained an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. To have obtained an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

BSENVE Program Overview

Environmental engineers work as private consultants, in industry and for government agencies in a wide variety of indoor and outdoor settings around the world. There is a strong and constant market for environmental engineers due to the demands placed on the profession to construct, maintain, and repair the drinking water, wastewater, water reuse and stormwater, and solid and hazardous waste management infrastructure. The curriculum prepares students to plan, using triple bottom line considerations, and design systems to minimize the impact of human activity on the environment and protect human health.

Educational Objectives

In accordance with its University, College, and Department missions, the faculty of the Department of Civil & Environmental Engineering has established clear educational objectives for our BSENVE graduates, five years after obtaining the degree:

1. Professional employment, primarily in the environmental engineering disciplines.

2. Commitment to continuous learning through graduate and post-graduate education, coursework, and research.

3. Being resourceful in finding solutions and retaining ownership and accountability for their work.

4. Positions of leadership, directing the work of others.

5. Professional licensure or certification in environmental engineering discipline and other professions.

6. Positions and active participation in community, public, and professional service.

Student Outcomes

To enable our graduates to achieve our educational objectives, the BSENVE program is designed to provide the following student outcomes at the time of graduation:

1. To have obtained an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. To have obtained an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. To have obtained an ability to communicate effectively with a range of audiences.
4. To have obtained an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. To have obtained an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. To have obtained an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. To have obtained an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

Programs

- Civil Engineering Major (B.S) (p. 96)
- Environmental Engineering Major (B.S.) (p. 99)
- Environmental Engineering Minor (p. 102)

Faculty

Civil and Environmental Engineering Department Faculty

Civil Engineering Major (B.S)

https://www.unh.edu/program/bachelor-science/civil-engineering

Description

Matriculating students should have strong aptitudes in mathematics and science along with imagination, spatial and graphic abilities, communication skills, and creativity.

Students follow a four-year program of study. The first two years of the program provide the necessary technical knowledge in mathematics, chemistry, and physics, while introducing and developing problem-solving techniques in eight courses tailored to civil engineering students. The junior year provides courses in each of the civil engineering sub-disciplines, providing students with skills in each and allowing students to determine which they wish to pursue further. The senior year is flexible, allowing students to choose where to focus attention by selecting from more than forty elective courses in civil and environmental engineering.

Additional opportunities exist for study abroad, cognates, minors, and dual majors, a three-year accelerated track, and early admission into two masters of science degree programs.

The Civil Engineering program (B Sci in Civil Engineering) is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Civil and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

More than half of the major's total credits and nearly all of the senior-level courses are elected by the student. Of these, there are Discovery Program electives required by the University and other electives required by the department in order to satisfy departmental objectives and accreditation requirements.

The Discovery Program is described in University Academic Requirements. Courses required by the BSCIVE program fulfill Discovery requirements in Inquiry and Environment, Technology, and Society; Writing Skills; Quantitative Reasoning; Physical Sciences and Discovery Lab; and Capstone.

To graduate with a bachelor of science in civil engineering, a student must achieve the following: 128 or more credits, credit for the civil engineering program's major and elective courses, satisfaction of the University's Discovery Program requirements, satisfaction of the University's writing-intensive course requirements, a cumulative grade-point average of 2.0 or better for all courses, and a cumulative grade-point average of 2.0 or better in all CEE courses.

Code	Title	Credits
Required Courses		
CEE 400	Introduction to Civil and Environmental Engineering	4
CEE 402	2D Computer Aided Design	3
CEE 403	GIS for Civil and Environmental Engineering	3
or CEE 404	Surveying and Mapping	
or NR 658	Introduction to Geographic Information Systems	
or ANTH 674	Archaeological Survey and Mapping in Belize	
CEE 500	Statics for Civil Engineers	3
CEE 501	Strength of Materials	3
CEE 502	Project Engineering	3
CEE 505	Introduction to Sustainable Engineering	3
CEE 520	Environmental Pollution and Protection: A Global Context	4
CEE 620	One Water Engineering	4
CEE 635	Engineering Materials	4
CEE 650	Fluid Mechanics	4
CEE 665	Soil Mechanics	4
CEE 680	Classical Structural Analysis	3
CEE 797	Introduction to Project Planning and Design	2
CEE 798	Project Planning and Design	2
CHEM 405	Chemical Principles for Engineers	4
or CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 539	Introduction to Statistical Analysis	4
or MATH 644	Statistics for Engineers and Scientists	
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
Electives		
Choose seven courses from the '700-level CEE Electives Course List' below with the following restrictions:		
1. Courses must be taken in four of six different areas (sustainability, environmental, materials, water resources, geotechnical, structural).		
2. At least three design courses; including one Project-based Design Elective PDE course.		
3. One of the seven 700-level courses is a senior technical elective.		
Design/Area Elective (Project-based Design Elective PDE)		3-4
Design/Area Elective		3-4
Design/Area Elective		3-4
Area Elective		3-4
CEE Elective		3-4
CEE Elective		3-4
Senior Technical Elective (choose a course from the '700-level CEE Electives Course List' below, CEPS 700-level course, GEOG 757, INCO 795, NR 757, TECH 750, or TECH 780).		3-4
700-Level CEE Electives		
Select courses from the following lists:		
Project-based Design Elective (PDE) Courses		
CEE 749	Pavement Design and Analysis	
CEE 755	Design of Pressurized Water Transmission Systems	
CEE 758	Stormwater Management Designs	
CEE 759	Stream Restoration	
CEE 778	Foundation Design I	
CEE 791	Reinforced Concrete Design	
CEE 793	Structural Design in Steel	
Additional Design Courses		
CEE 719	Green Building Design	
CEE 730	Public Health Engineering for Rural and Developing Communities	
CEE 731	Advanced Water Treatment Processes	
CEE 732	Solid Waste Facility and Remediation System Design	
CEE 779	Foundation Design II	
CEE 789	Timber Design	
CEE 790	Structural Design in Masonry	
CEE 792	Pre-stressed Concrete	
CEE 794	Bridge Design	
Structural Engineering (STR) Area Courses		
CEE 780	Matrix Structural Analysis and Modeling	
CEE 781	Dynamics of Structures	
CEE 789	Timber Design	
CEE 790	Structural Design in Masonry	
CEE 791	Reinforced Concrete Design	
CEE 792	Pre-stressed Concrete	
CEE 793	Structural Design in Steel	
CEE 794	Bridge Design	
Geotechnical Engineering (GEO) Area Courses		
CEE 765	Engineering Behavior of Soils	
CEE 766	Introduction to Geotechnical Earthquake Engineering	
CEE 768	Geo-Environmental Engineering	
CEE 778	Foundation Design I	
CEE 779	Foundation Design II	
Material (MAT) Area Courses		
CEE 733	Public Infrastructure Asset Management	

CEE 735	Properties and Production of Concrete
CEE 736	Asphalt Mixtures and Construction
CEE 749	Pavement Design and Analysis
Water Resources (WAT) Area Courses	
CEE 751	Open Channel Flow
CEE 753	Snow Hydrology
CEE 754	Engineering Hydrology
CEE 755	Design of Pressurized Water Transmission Systems
CEE 758	Stormwater Management Designs
CEE 759	Stream Restoration
Environmental Engineering (ENV) Area Courses	
CEE 720	Waste Management and Site Remediation
CEE 721	Environmental Sampling and Analysis
CEE 722	Introduction to Marine Pollution and Control
CEE 723	Environmental Engineering Chemistry
CEE 724	Environmental Engineering Microbiology
CEE 730	Public Health Engineering for Rural and Developing Communities
CEE 731	Advanced Water Treatment Processes
CEE 732	Solid Waste Facility and Remediation System Design
CEE 768	Geo-Environmental Engineering
Sustainability (SUS) Area Courses	
CEE 706	Environmental Life Cycle Assessment
CEE 719	Green Building Design
CEE 733	Public Infrastructure Asset Management
Additional CEE Elective Courses	
CEE 700	Building Information Modeling
CEE 703	Site Design and Project Development
CEE 704	

Additional Information

To transfer into the BSCIVE major, a student must satisfy the following:

1. Be a CEPS major or have at least 12 credits of graded work at UNH along with Calculus I, and either chemistry or calculus-based physics.
2. Have an overall UNH grade-point average of 2.33 or greater.
3. Have an overall grade-point average of 2.33 or greater in all CEE courses taken to date;
4. Have a grade-point average of 2.33 or greater in courses taken to date at UNH of MATH 425, PHYS 407, CHEM 403 or CHEM 405, CEE 500 or ME 525 ; and CEE 501 or ME 526 .
5. Have a grade-point average of 2.33 or greater in courses taken to date of CEE 500, CEE 501, ME 525, ME 526

At the time of transferring into the BSCIVE program, only CEE 600-level and CEE 700-level classes with a grade of C- or better may be transferred in.

BSCIVE majors wishing to participate in domestic or international exchange programs must achieve a cumulative grade-point average of 2.75 or better in all CEE courses taken to date at the time of application to the exchange program.

To begin taking the required CEE 600-level courses in the junior year, students must meet the following requirements:

1. MATH 425, PHYS 407, CHEM 403 or CHEM 405, CEE 500 or ME 525 ; and CEE 501 or ME 526 must have been completed with passing grades.
2. The student must have a grade-point average of 2.00 or greater in all CEE courses.
3. The student must have a grade-point average of 2.00 or greater in MATH 425, PHYS 407, CHEM 403 or CHEM 405, CEE 500 or ME 525 , and CEE 501 or ME 526 .
4. The student must have a grade-point average of 2.00 or greater in CEE 500 or ME 525 and CEE 501 or ME 526 .

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CEE 400	Introduction to Civil and Environmental Engineering	4
CEE 520	Environmental Pollution and Protection: A Global Context	4
CEE 402	2D Computer Aided Design	3
MATH 418	Analysis and Applications of Functions (if necessary, 0-4 credits)	
Discovery Program requirement [1]		4
	Credits	**15**
Spring		
MATH 425	Calculus I	4
PHYS 407	General Physics I	4
Elective Spatial Metrics [3]		4
ENGL 401	First-Year Writing	4
	Credits	**16**
Second Year		
Fall		
CEE 500	Statics for Civil Engineers	3
CEE 502	Project Engineering	3
MATH 426	Calculus II	4
PHYS 408	General Physics II	4
Discovery Program requirement [1]		4
	Credits	**18**
Spring		
CEE 501	Strength of Materials	3
CEE 505	Introduction to Sustainable Engineering	3
CHEM 405	Chemical Principles for Engineers	4
MATH 527	Differential Equations with Linear Algebra	4
Discovery Program requirement [1]		4
	Credits	**18**
Third Year		
Fall		
CEE 635	Engineering Materials	4
CEE 650	Fluid Mechanics	4
CEE 680	Classical Structural Analysis	3
Discovery Program requirement [1]		4
	Credits	**15**
Spring		
CEE 620	One Water Engineering	4
CEE 665	Soil Mechanics	4
Elective Statistics [3]		4

Discovery Program requirement [1]		4
	Credits	**16**
Fourth Year		
Fall		
CEE 797	Introduction to Project Planning and Design	2
Elective Project-Based Design Elective [3]		4
Elective Area Elective 2 [3]		3
Elective Civil Engineering [3]		3
Discovery Program requirement [1]		4
	Credits	**16**
Spring		
CEE 798	Project Planning and Design	2
Elective Area Elective 3 [3]		3
Elective Area Elective 4 [3]		3
Elective Civil Engineering [3]		3
Elective Senior Technical Elective [3]		3
	Credits	**14**
	Total Credits	**128**

1. A course satisfying one each of the Discovery Program categories of Biological Science, Humanities, Fine and Performing Arts, Historical Perspectives, Social Science and World Cultures, preferably taken in this order. The Discovery Social Science elective must be selected from CEP 415, ECON 401, ECON 402, NR 411, GEOG 582, or POLT 402.
2. Satisfies capstone requirement for Discovery.
3. Approved list available in the CEE office.

Student Learning Outcomes

Program Learning Outcomes

By the time of graduation students have attained:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Environmental Engineering Major (B.S.)

https://www.unh.edu/program/bachelor-science/environmental-engineering

Description

Environmental engineers graduating with a B.S. EnvE degree will plan, design, and construct public and private facilities to minimize the impact of human activity on the environment through sustainable approaches that protect human health. For example, environmental engineers design and build drinking water treatment systems, municipal and industrial wastewater treatment plants, solid waste management facilities, air pollution control systems, contaminated ground water remediation systems, and hazardous waste remediation facilities. These facilities must meet regulatory requirements, be cost effective to build and maintain, be safe to operate, and have minimal environmental impact.

In CEE 400 Introduction to Civil and Environmental Engineering and CEE 420 Environmental Engineering Gateway, students are introduced to the full spectrum of environmental engineering projects that they will subsequently explore in design teams during their degree program. In CEE 505 Introduction to Sustainable Engineering, students learn tools to analyze life cycles and are exposed to global actions for sustainability. In CEE 520 Environmental Pollution and Protection: A Global Context, students tour field sites, and through junior and senior year classes and student organizations (ASCE, EWRI, EWB), they interact with engineers who talk about engineering consulting, environmental policy, and design practices applied to local and global projects. As part of these projects, students:

1. analyze treatment alternatives;
2. recommend a system that meets regulatory operational needs, and is sustainable; and
3. prepare an implementation schedule and project budget.

Students choose elective courses from areas of Sustainability, Water Resources, Environmental Engineering Design, and other relevant topics. Design projects are completed in a minimum of two design electives. In the capstone design experience courses, students work on a multi-disciplinary environmental engineering project and apply skills learned in other courses while working with real-world problems and clients.

The Environmental Engineering program (B Sci in Environmental Engineering) is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Environmental Engineering and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 130 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

To qualify for graduation, an EnvE major must: have satisfied all specified course requirements, have satisfied the University's Academic Requirements, have a minimum cumulative grade-point average of 2.00, and have a minimum grade-point average of 2.00 in engineering courses.

At the end of the sophomore year, students are required to have a minimum overall grade-point average of 2.00 and a minimum grade-point average of 2.00 in CEE 420, MATH 425, CHEM 405, PHYS 407, MATH 426, CEE 500, CEE 520 to be permitted to enroll in junior-level courses.

Several courses required in the curriculum may fulfill both major and Discovery Program requirements as described in footnotes.

For a full listing of the requirements distributed over four years of study please refer to the sample degree plan.

Code	Title	Credits
Required Courses		
CEE 402	2D Computer Aided Design	3
CEE 420	Environmental Engineering Gateway	3
or CEE 400	Introduction to Civil and Environmental Engineering	
CEE 500	Statics for Civil Engineers	3
CEE 502	Project Engineering	3
CEE 505	Introduction to Sustainable Engineering	3
CEE 520	Environmental Pollution and Protection: A Global Context [1]	4
CEE 620	One Water Engineering	4
CEE 650	Fluid Mechanics	4
CEE 720	Waste Management and Site Remediation	3
CEE 721	Environmental Sampling and Analysis	4
CEE 723	Environmental Engineering Chemistry	4
CEE 724	Environmental Engineering Microbiology [1]	4
CEE 731	Advanced Water Treatment Processes	4
CHEM 405	Chemical Principles for Engineers	4
or CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	
ESCI 654	Fate and Transport in the Environment	4
MATH 425	Calculus I [1]	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 644	Statistics for Engineers and Scientists	4
or MATH 539	Introduction to Statistical Analysis	
PHYS 407	General Physics I [1]	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
Capstone Design Experience		
CEE 797	Introduction to Project Planning and Design [1]	2
CEE 798	Project Planning and Design [1]	2

Electives

- *Design and Environmental/Civil Engineering Electives:* four 700-level courses are required, two courses must be Design Electives, with a minimum of 12 total credits.
- *Additional Electives:* One CEE Lab Elective, one Geospatial Elective, one Sustainability Elective, one Public Health Elective and two Water Resources Electives are required.
- Each elective course can only be used to fulfill one category.
- Course lists are subject to change, check with advisor.

Code	Title	Credits
Design Electives or Environmental/Civil Engineering Electives		
CEE 719	Green Building Design	3
CEE 729	Sources, Control, and Stewardship of Air Pollution	4
CEE 730	Public Health Engineering for Rural and Developing Communities	3
CEE 732	Solid Waste Facility and Remediation System Design	4
CEE 755	Design of Pressurized Water Transmission Systems	4
CEE 758	Stormwater Management Designs	3
CEE 759	Stream Restoration	4
ME 706	Renewable Energy: Physical and Engineering Principles	3
OE 720	Design of Recirculating Aquaculture Systems	3
OE 758	Design of Ocean Structures	3

Code	Title	Credits
Environmental/Civil Engineering Electives		
CEE 706	Environmental Life Cycle Assessment	3
CEE 719	Green Building Design	3
CEE 722	Introduction to Marine Pollution and Control	4
CEE 729	Sources, Control, and Stewardship of Air Pollution	4
CEE 730	Public Health Engineering for Rural and Developing Communities	3
CEE 732	Solid Waste Facility and Remediation System Design	4
CEE 733	Public Infrastructure Asset Management	4
CEE 751	Open Channel Flow	3
CEE 753	Snow Hydrology	3
CEE 754	Engineering Hydrology	3
CEE 755	Design of Pressurized Water Transmission Systems	4
CEE 758	Stormwater Management Designs	3
CEE 759	Stream Restoration	4
CEE 768	Geo-Environmental Engineering	3
CEE 768	Geo-Environmental Engineering	3
OE 720	Design of Recirculating Aquaculture Systems	3
OE 757	Coastal Engineering and Processes	3
OE 758	Design of Ocean Structures	3
AGFS 632	Urban Agriculture	4
CHBE 709	Fundamentals of Air Pollution and Its Control	4

Code	Title	Credits
CEE Lab Electives		
Select one course from the following:		
CEE 665	Soil Mechanics	4
CEE 721	Environmental Sampling and Analysis	4

Code	Title	Credits
Geospatial Electives		
Select one course from the following:		
CEE 403	GIS for Civil and Environmental Engineering	3
CEE 404	Surveying and Mapping	4
NR 658	Introduction to Geographic Information Systems	4
NR 757	Remote Sensing of the Environment	4

Code	Title	Credits
Sustainability Electives		
Select one course from the following:		
CEE 706	Environmental Life Cycle Assessment	3
CEE 719	Green Building Design	3
CEE 733	Public Infrastructure Asset Management	4
CHBE 705	Fossil Fuels and Renewable Energy Sources	4
ME 706	Renewable Energy: Physical and Engineering Principles	3

Code	Title	Credits
Water Resources Electives		
Select two courses from the following:		
CEE 751	Open Channel Flow	3
CEE 753	Snow Hydrology	3
CEE 754	Engineering Hydrology	3
CEE 755	Design of Pressurized Water Transmission Systems	4
CEE 758	Stormwater Management Designs	3
CEE 759	Stream Restoration	4
ESCI 705	Principles of Hydrology	4

ESCI 710	Groundwater Hydrology	4
OE 757	Coastal Engineering and Processes	3

Code	Title	Credits
Public Health Electives		
Select one course from the following:		
HMP 403	Introduction to Public Health	4
HMP 501	Epidemiology and Community Medicine	4
HMP 715	Environmental Health	4
CEE 730	Public Health Engineering for Rural and Developing Communities	3

[1] Discovery Program requirements are fulfilled with the following courses:

- Quantitative Reasoning (QR): MATH 425 Calculus I
- Physical Science (PS): PHYS 407 General Physics I
- Environmental, Technology, and Society (ETS): CEE 520 Environmental Pollution and Protection: A Global Context
- Biological Science (BS): CEE 724 Environmental Engineering Microbiology
- Capstone: CEE 797 Introduction to Project Planning and Design and CEE 798 Project Planning and Design

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CEE 420 or CEE 400	Environmental Engineering Gateway or Introduction to Civil and Environmental Engineering	3
ENGL 401	First-Year Writing [2]	4
CHEM 405	Chemical Principles for Engineers	4
MATH 418	Analysis and Applications of Functions [1, 4]	
Discovery Elective [2]		4
	Credits	**15**
Spring		
CEE 402	2D Computer Aided Design	3
MATH 425	Calculus I [1, 2]	4
PHYS 407	General Physics I [2]	4
Discovery Elective [2]		4
	Credits	**15**
Second Year		
Fall		
CEE 403	GIS for Civil and Environmental Engineering	3
or other Geospatial Elective		
CEE 502	Project Engineering	3
CEE 520	Environmental Pollution and Protection: A Global Context [2]	4
MATH 426	Calculus II	4
Discovery Elective [2]		4
	Credits	**18**
Spring		
CEE 500	Statics for Civil Engineers	3
CEE 505	Introduction to Sustainable Engineering	3
MATH 527	Differential Equations with Linear Algebra	4
Discovery Elective [2]		4
Public Health Elective		4
	Credits	**18**
Third Year		
Fall		
CEE 650	Fluid Mechanics	4
CEE 724	Environmental Engineering Microbiology	4
Sustainability Elective		3-4
Math Statistics Elective		4
Discovery Elective [2]		4
	Credits	**19-20**
Spring		
CEE 620	One Water Engineering	4
ESCI 654	Fate and Transport in the Environment	4
CEE 720	Waste Management and Site Remediation	3
Water Resources Elective		3-4
	Credits	**14-15**
Fourth Year		
Fall		
CEE 721	Environmental Sampling and Analysis	4
CEE 723	Environmental Engineering Chemistry	4
CEE 797	Introduction to Project Planning and Design [2]	2
CEE Design Elective (1)		3-4
CEE Elective (1)		3-4
	Credits	**16-18**
Spring		
CEE 731	Advanced Water Treatment Processes	4
CEE 798	Project Planning and Design [2]	2
CEE Elective (1)		3-4
CEE Design Elective (1)		3-4
Water Resources Elective		3-4
	Credits	**15-18**
	Total Credits	**130-137**

The Environmental Engineering B.S. program requires a minimum of 130 total credits for graduation.

[1] Students who passed the ALEKS placement examination as determined by the Mathematics Department may enroll in MATH 425 Calculus I. Subsequent MATH courses (MATH 426 Calculus II, MATH 527 Differential Equations with Linear Algebra Differential Equations with Linear Algebra, MATH 644 Statistics for Engineers and Scientists) will be taken one semester earlier than shown here.

[2] Discovery Program requirements are fulfilled with the following courses:

- Writing Skills: ENGL 401 First-Year Writing
- Quantitative Reasoning (QR): MATH 425 Calculus I
- Physical Science (PS): PHYS 407 General Physics I

- Environmental, Technology, and Society (ETS): CEE 520 Environmental Pollution and Protection: A Global Context
- Biological Science (BS): CEE 724 Environmental Engineering Microbiology
- Capstone: CEE 797 Introduction to Project Planning and Design and CEE 798 Project Planning and Design
- Fine and Performing Arts (FPA), Historical Perspectives (HP), Humanities (HUMA), Social Science (SS), and World Cultures (WC): Courses in the EnvE curriculum designated Discovery Electives can be selected from the University's approved Discovery Program courses to fulfill these requirements. One of these electives must have an Inquiry (INQ) attribute.

[3] Approved lists of sustainability, water resources, design and Environmental/Civil electives are available from the EnvE undergraduate coordinator.

[4] MATH 418 does not count toward the minimum required credits for the degree program.

Student Learning Outcomes

Program Learning Outcomes

By the time of graduation students have attained:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Environmental Engineering Minor

https://www.unh.edu/program/minor/environmental-engineering

Description

The environmental engineering minor is intended primarily for students in engineering and physical sciences who are not in the chemical, civil, or environmental engineering degree programs. Students contemplating such a minor should plan on a strong background in the sciences and mathematics (including differential equations).

The minor provides a comprehensive introduction to major areas of interest in environmental protection through the three required courses. Further breadth in environmental engineering or depth in specific areas can be attained through the choice of appropriate elective courses.

Requirements

Academic policies related to Minors.

Credit toward the minor will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the minor.

The minor requires a minimum of five courses, as follows:

Code	Title	Credits
Required Courses		
CEE 620	One Water Engineering	4
CEE 705		3
CEE 731	Advanced Water Treatment Processes	4
or CEE 721	Environmental Sampling and Analysis	
Electives		
Select a minimum of two elective CEE courses.		

Choice of elective courses should be made in consultation with the minor area advisor. Students normally start this program in the junior year and should declare their intention to enter the program as early as possible during the sophomore year.

Prerequisite courses required to take the courses listed above include CHEM 404 or CHEM 405, PHYS 407 or 407S, MATH 425, CEE 520, CEE 650, and CEE 723.

Computer Science

Undergraduate students may choose from one of seven degree options: the B.S. in Computer Science, which is intended for students interested in the design and implementation of software systems; the B.A. in Computer Science - Algorithms Option, which focuses#on fundamental concepts in the areas of algorithms, artificial intelligence and machine learning; the B.A. in Computer Science - Cybersecurity Option, which is designed for students who are interested in computer and network security; the B.A. in Computer Science - Systems option, which focuses on fundamental concepts in the areas of computing systems and data communication; the B.S. in Information Technology, which focuses on the application of existing computing technologies to meet the information needs of organizations and individual computer users; the B.S. in Analytics, which emphasizes the application of data science in business and industry; or the B.S. in Data Science, which focuses on the theoretical and computational underpinnings of modern data science.

https://ceps.unh.edu/computer-science/

Programs

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Faculty

Computer Science Department Faculty

Analytics Major (B.S.)

https://www.unh.edu/program/bachelor-science/analytics

Description

The BS in Analytics is intended for students interested in either heading into industry immediately upon graduation, or pursuing graduate work in a professionally oriented program. The program places its emphasis on applications of data science in business and industry.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Successful completion of the degree program includes earning a minimum of 128 credits, meeting the requirements of the University's Discovery Program, completing 25 required courses in the major as listed below, including the capstone courses.

The following courses or their equivalents must be passed with a grade of C- or better in order to meet the Analytics major requirements: CS 415, CS 416 (or CS 417), CS 457, IT 505 (or CS 515), and IT 520 (or CS 420).

Students are expected to demonstrate consistent progress towards the satisfaction of the core degree requirements and are allowed two repeats of the aforementioned courses before being removed from the program. This can be a single class repeated twice or two classes repeated once. Students may petition to be reinstated after one year out of the program.

Transfer students may transfer up to a maximum of 32 credits to satisfy major requirements (not counting those courses used to satisfy Discovery Program requirements).

Code	Title	Credits
Required Courses		
Mathematics		
MATH 425	Calculus I	4
MATH 426	Calculus II	4
MATH 539	Introduction to Statistical Analysis	4
or MATH 540	Probability & Statistics	
or MATH 644	Statistics for Engineers and Scientists	
MATH 645	Linear Algebra for Applications	4
or MATH 545	Introduction to Linear Algebra	
MATH 739	Applied Regression Analysis	4
Computer Science		
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
or CS 410P	Introduction to Scientific Programming/Python	
CS 416	Introduction to Computer Science II	4
or CS 417	From Programs to Computer Science	
CS 457	Introduction to Data Science and Analytics	4
IT 505	Integrative Programming	4
or CS 515	Data Structures and Introduction to Algorithms	
IT 520	Foundations of Information Technology	4
or CS 420	Foundations of Programming for Digital Systems	
Business		
ADMN 401W	Introduction to Responsible Business Management	4
ECON 401	Principles of Economics (Macro)	4
or ECON 402	Principles of Economics (Micro)	
MGT 535	Organizational Behavior	4
English		
ENGL 502	Professional and Technical Writing	4
Analytics		
CS 674 & CS 675	Fundamentals of Statistical Learning I and Fundamentals of Statistical Learning II	8
or CS 674 & CS 750	Fundamentals of Statistical Learning I and Machine Learning	
or MATH 738 & CS 750	Data Mining and Predictive Analytics and Machine Learning	
IT 630	Data Science and Scalable Data Systems	4
or CS 775	Database Systems	
Capstone		
CS 791 & CS 792	Senior Project I and Senior Project II	4
or CS 799	Thesis	
Minor		
Select and complete one of the following approved Minors:		20
Artificial Intelligence Minor		
Business Administration Minor		
Cybersecurity Minor		
Economics Minor		
Information Technology Minor		
Statistics Minor		
Total Credits		**94**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
CS 457	Introduction to Data Science and Analytics	4
MATH 425	Calculus I	4

ENGL 401	First-Year Writing	4
	Credits	**18**
Spring		
CS 416	Introduction to Computer Science II	4
MATH 426	Calculus II	4
MATH 539 or MATH 644	Introduction to Statistical Analysis or Statistics for Engineers and Scientists	4
ADMN 401W	Introduction to Responsible Business Management	4
	Credits	**16**
Second Year		
Fall		
IT 520 or CS 420	Foundations of Information Technology or Foundations of Programming for Digital Systems	4
CS 674	Fundamentals of Statistical Learning I	4
Minor Elective I		4
Discovery Lab		4
	Credits	**16**
Spring		
IT 505	Integrative Programming	4
MATH 645 or MATH 545	Linear Algebra for Applications or Introduction to Linear Algebra	4
ENGL 502	Professional and Technical Writing	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
	Credits	**16**
Third Year		
Fall		
MGT 535	Organizational Behavior	4
IT 630	Data Science and Scalable Data Systems	4
MATH 739	Applied Regression Analysis	4
Minor Elective II		4
	Credits	**16**
Spring		
CS 675	Fundamentals of Statistical Learning II	4
Minor Elective III		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
CS 791	Senior Project I	2
Minor Elective IV		4
General Elective		4
Discovery Course		4
Discovery Course		4
	Credits	**18**
Spring		
CS 792	Senior Project II	2
Minor Elective V		4
Discovery Course		4
Discovery Course		4
	Credits	**14**
	Total Credits	**130**

Student Learning Outcomes

Program Learning Outcomes

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply theory, techniques, and tools throughout the data analysis lifecycle and employ the resulting knowledge to satisfy stakeholders' needs.

Analytics Minor

https://www.unh.edu/program/minor/analytics

Description

The demand for data-savvy individuals has never been higher, and the analytics minor gives you an introduction to the tools you'll need for a career involving data science and analytics, focused on the application of data science in industry. In addition to courses in mathematics, computer science and analytics, you can study neural networks and big data. Combine this minor with a major in the sciences, computer science, business, marketing or social sciences to bring enhanced skills to your career or graduate studies. With the experience provided by this minor, you'll gain a competitive advantage in this rapidly growing field. The objective of this minor is to provide a basic background in analytics for those interested in applications.

Students interested in the Analytics minor should contact matthew.magnusson@unh.edu for more information.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
CS 415	Introduction to Computer Science I	4
or CS 410C	Introduction to Scientific Programming/C	
or CS 410P	Introduction to Scientific Programming/Python	
CS 457	Introduction to Data Science and Analytics	4
ADMN 401W	Introduction to Responsible Business Management	4
or ECON 401	Principles of Economics (Macro)	
or ECON 402	Principles of Economics (Micro)	
Select one course from the following:		4
CS 674	Fundamentals of Statistical Learning I	
CS 750	Machine Learning	
IT 630	Data Science and Scalable Data Systems	

MATH 738	Data Mining and Predictive Analytics	
Select one course from the following:		4
ADMN 510	Business Analytics and Statistics	
BIOL 528	Applied Biostatistics I	
BUS 430	Introduction to Business Statistics	
MATH 439	Statistical Discovery for Everyone	
MATH 539	Introduction to Statistical Analysis	
MATH 644	Statistics for Engineers and Scientists	
PSYC 402	Statistics in Psychology	
Total Credits		**20**

Artificial Intelligence Minor

https://www.unh.edu/program/minor/artificial-intelligence

Description

The objective of this minor is to provide a basic background for those who have had an introductory programming class and are interested in diving deeper into the foundations of artificial intelligence and machine learning.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
CS 416	Introduction to Computer Science II [1]	4
or CS 417	From Programs to Computer Science	
or CS 419	Computer Science for Engineers and Scientists	
CS 515	Data Structures and Introduction to Algorithms	4
CS 730	Introduction to Artificial Intelligence	4
or CS 750	Machine Learning	
or CS 752	Foundations of Neural Networks	
Electives		
Select two courses from the following:		8
CS 550	Foundations of Machine Learning	
CS 674	Fundamentals of Statistical Learning I	
CS 675	Fundamentals of Statistical Learning II	
CS 730	Introduction to Artificial Intelligence [2]	
CS 733	Mobile Robotics	
CS 750	Machine Learning	
CS 751	Reinforcement Learning	
CS 752	Foundations of Neural Networks	
CS 753	Information Retrieval and Generation Systems	
CS 755	Computer Vision	
CS 757	Mathematical Optimization for Applications	
CS 759	Natural Language Processing	
CS 781	Data Science for Knowledge Graphs and Text	
Total Credits		**20**

1 CS 416 has a prerequisite of CS 415, CS 410C, or CS 410P.
2 Students may select CS 730 Introduction to Artificial Intelligence if not already taken to fulfill a required course.

Computer Programming Cognate

https://www.unh.edu/program/cognate/computer-programming

Description

The Cognate in Programming is designed so that students who wish to go beyond an introductory computer programming course are able to meet the challenges that technology imposes.

This cognate is for UNH students who are interested in acquiring skills beyond just a basic programming language. This cognate would be an alternative to students who are not going to pursue a minor in Computer Science or Information Technology but still want to have the opportunity to partake a coherent, if short, curriculum that gives them a foundation to participate in programming activities as applicable to their technical areas.

The cognate will appear on each student's transcript.

Requirements

Credit toward the cognate will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the cognate. Courses taken on a pass/fail basis may not be used for the cognate.

Students need to complete a certification of completion of cognate form at the beginning of their final semester.

Code	Title	Credits
Required Course		
IT 403	Introduction to Internet Technologies	4
Select one of the following options:		8
Option A:		
CS 415	Introduction to Computer Science I	
CS 416	Introduction to Computer Science II	
or IT 505	Integrative Programming	
Option B:		
CS 410P	Introduction to Scientific Programming/Python	
or CS 410C	Introduction to Scientific Programming/C	
CS 417	From Programs to Computer Science	
or IT 505	Integrative Programming	
Total Credits		**12**

Computer Science Major (B.S.)

https://www.unh.edu/program/bachelor-science/computer-science

Description

Computer science focuses on problem solving with a particular emphasis on the design of computer-efficient solutions. Within a few years of obtaining a bachelor's degree alumni will have:

1. Engaged in successful careers in diverse areas of software development and will be pursuing advanced education in computer science or related fields;
2. Applied the full range of core computer science concepts and techniques to fill software development needs of an organization;
3. Adapted to changing directions of computing technology and used state-of-the-art techniques to confront new problems effectively;
4. Navigated the complex interconnections between software and the goals and constraints of the organization served;

5. Participated responsibly in the pervasive and changing role of computing technology in global society as both software engineers and citizens;
6. Operated collaboratively in a team environment and assumed leadership roles.

The Bachelor of Science in Computer Science program is accredited by the Computing Accreditation Commission of ABET, under the commission's General Criteria and Program Criteria for Computer Science and Similarly Named Computing Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Computer science majors must maintain an overall grade-point average of 2.0 or better in all required computer science, mathematics, and computer engineering courses in order to graduate. If at the end of any semester, including the first, a student's cumulative grade-point average in these courses falls below 2.0, the student may not be allowed to continue as a CS major.

The following courses or their equivalents must be passed with a grade of C- or better in order to meet the CS major requirements: CS 415, CS 416, CS 420, CS 515, CS 520, and IT 403.

Students are expected to demonstrate consistent progress towards the satisfaction of the core degree requirements and are allowed two repeats of the aforementioned courses before being dismissed from the program. This can be a single course repeated twice or two courses repeated once. Students may petition for reinstatement one-year after program dismissal.

If a student wishing to transfer into the computer science major has any coursework that is applicable to the major, the grades in those courses must satisfy the minimum grade requirements for the B.S. degree in computer science. The student must have an overall grade-point average of 2.0 or better in all courses taken at the university.

Computer science majors must complete the following coursework in computer science, mathematics, computer engineering, and science. (all courses are 4 credits unless indicated otherwise):

Code	Title	Credits
Computer Science Courses		
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
or CS 410C	Introduction to Scientific Programming/C	
or CS 410P	Introduction to Scientific Programming/Python	
CS 416	Introduction to Computer Science II	4
CS 420	Foundations of Programming for Digital Systems	4
IT 403	Introduction to Internet Technologies	4
CS 501	Professional Ethics and Communication in Technology-related Fields	4
CS 515	Data Structures and Introduction to Algorithms	4
CS 518	Introduction to Software Engineering	4
CS 520	Computer Organization and System-Level Programming	4
CS 527	Fundamentals of Cybersecurity	4
CS 619	Introduction to Object-Oriented Design and Development	4
CS 620	Operating System Fundamentals	4
CS 659	Introduction to the Theory of Computation	4
CS 758	Algorithms	4
CS 761	Programming Language Concepts and Features	4
CS 791 & CS 792	Senior Project I and Senior Project II	4
or CS 799	Thesis	
Computer Science Electives		
Select one course from the following implementation electives:		4
CS 712	Compiler Design	
CS 720	Systems Programming	
CS 730	Introduction to Artificial Intelligence	
CS 735	Introduction to Parallel and Distributed Programming	
CS 752	Foundations of Neural Networks	
CS 753	Information Retrieval and Generation Systems	
CS 770	Computer Graphics	
CS 781	Data Science for Knowledge Graphs and Text	
Select three additional CS courses numbered 690-799		12
Professional Electives [1]		
Select one course from the following:		3-4
CS 700-level course		
CS 550	Foundations of Machine Learning	
IT 502	Intermediate Web Design	
IT 604	Server-side Web Development	
IT 605	Full-Stack Web Development	
IT 612	Scripting Languages	
IT 630	Data Science and Scalable Data Systems	
IT 666	Cybersecurity Practices	
IT 705	Project Management for Information Technology	
MATH 525	Linearity I	
MATH 526	Linearity II	
MATH 527	Differential Equations with Linear Algebra	
MATH 528	Multidimensional Calculus	
MATH 545	Introduction to Linear Algebra	
MATH 645	Linear Algebra for Applications	
MATH 647	Complex Analysis for Applications	
MATH 736	Advanced Statistical Modeling	
MATH 737	Statistical Methods for Quality Improvement and Design	
MATH 739	Applied Regression Analysis	
MATH 740	Design of Experiments I	
MATH 741	Survival Analysis	
MATH 743	Time Series Analysis	
MATH 745	Foundations of Applied Mathematics I	
MATH 747	Introduction to Nonlinear Dynamics and Chaos	
MATH 753	Introduction to Numerical Methods I	
MATH 755	Probability with Applications	
MATH 756	Principles of Statistical Inference	
MATH 760	Geometry	
MATH 761	Abstract Algebra	
MATH 767	One-Dimensional Real Analysis	
MATH 783	Set Theory	
MATH 784	Topology	
MATH 788	Complex Analysis	
ECE 562	Computer Organization	
ECE 649	Embedded Microcomputer Based Design	
ECE 700-level course		
GEN 604	Principles of Genetics	
GEN 711	Genomics and Bioinformatics	
Mathematics Courses		
MATH 425	Calculus I	4

or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 531	Mathematical Proof	4
MATH 539	Introduction to Statistical Analysis	4
or MATH 540	Probability & Statistics	
or MATH 644	Statistics for Engineers and Scientists	
Science courses [2]		
One Discovery Biological Science (BS) with Discovery Lab		4
One Discovery Physical Science (PS) with Discovery Lab		4
Other Courses		
Discovery requirements not already covered by required courses [3]		24
Total Credits		**129-130**

[1] Professional electives must either be chosen from the list of approved courses or another non-introductory CEPS course with significant science and/or engineering focus approved on a per-course basis by the undergraduate studies committee.

[2] Courses must carry the Discovery attributes of Biological Science or Physical Science and include Discovery lab (DLAB).

[3] One of these courses must be writing intensive.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
IT 403	Introduction to Internet Technologies	4
MATH 425	Calculus I	4
Discovery I		4
	Credits	**18**
Spring		
CS 416	Introduction to Computer Science II	4
CS 420	Foundations of Programming for Digital Systems	4
MATH 426	Calculus II	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Second Year		
Fall		
CS 515	Data Structures and Introduction to Algorithms	4
CS 518 or CS 527	Introduction to Software Engineering or Fundamentals of Cybersecurity	4
MATH 531 or MATH 539 or MATH 644	Mathematical Proof or Introduction to Statistical Analysis or Statistics for Engineers and Scientists	4
CS 501	Professional Ethics and Communication in Technology-related Fields (or Discovery II)	4
	Credits	**16**
Spring		
CS 520	Computer Organization and System-Level Programming	4
MATH 539 or MATH 644 or MATH 531	Introduction to Statistical Analysis or Statistics for Engineers and Scientists or Mathematical Proof	4
CS 527 or CS 518	Fundamentals of Cybersecurity or Introduction to Software Engineering	4
Discovery II (or CS 501)		4
	Credits	**16**
Third Year		
Fall		
CS 619	Introduction to Object-Oriented Design and Development	4
CS 620	Operating System Fundamentals (or Professional Elective)	4
CS 659	Introduction to the Theory of Computation	4
Discovery III		4
	Credits	**16**
Spring		
CS 758 or CS 761	Algorithms or Programming Language Concepts and Features	4
CS 700-level Elective I		4
Professional Elective (or CS 620)		4
Discovery IV		4
	Credits	**16**
Fourth Year		
Fall		
CS 791	Senior Project I	2
CS 761 or CS 758	Programming Language Concepts and Features or Algorithms	4
CS 700-level Implementation Elective (or 700-Level Elective II)		4
Discovery V		4
Discovery VI		4
	Credits	**18**
Spring		
CS 792	Senior Project II	2
CS 700-level Elective II (or Implementation Elective)		4
CS 700-level Elective III		4
Discovery VII		4
	Credits	**14**
	Total Credits	**130**

Discovery (7): Historical Perspectives, Humanities, Fine and Performing Arts, Social Science, World Cultures, Physical Science Discovery Lab, Biological Science Discovery Lab with ONE mandatory course with Writing Intensive (WI) attribute

Student Learning Outcomes

Graduates of the UNH BS CS program will have an ability to:

- Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply computer science theory and software development fundamentals to produce computing-based solutions.
- Learn independently about new technologies, and develop the skills needed to understand them.

Computer Science Major: Artificial Intelligence Option (B.A.)

https://www.unh.edu/program/bachelor-arts/computer-science-artificial-intelligence

Description

The B.A. in Computer Science will allow students to combine the study of computer science with the study of another field. Given the emergence of computational approaches to virtually all areas of scholarship and creative expression, it is important to offer this flexibility. The three tracks in the B.A. program contain the same computer science core as the B.S. program, but give more control to the student to choose the complementary and advanced courses.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Computer science majors must maintain an overall grade-point average of 2.0 or better in all required computer science, mathematics, and computer engineering courses in order to graduate. If at the end of any semester, including the first, a student's cumulative grade-point average in these courses falls below 2.0, the student may not be allowed to continue as a CS major.

The following courses or their equivalents must be completed with a grade of C- or better in order to meet the CS major requirements: CS 415, CS 416, CS 420, CS 515, CS 520, and IT 403.

Students are expected to demonstrate consistent progress towards the satisfaction of the core degree requirements and are allowed two repeats of the aforementioned courses before being subject to removal from the program. This can be a single class repeated twice or two classes repeated once. Students may petition to be reinstated after a one-year absence from the program.

If a student wishing to transfer into the computer science major has any coursework that is applicable to the major, the grades in those courses must satisfy the minimum grade requirements for the B.S. degree in computer science. The student must have an overall grade-point average of 2.0 or better in all courses taken at the university.

Code	Title	Credits
Computer Science Courses		
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
or CS 410P	Introduction to Scientific Programming/Python	
or CS 410C	Introduction to Scientific Programming/C	
CS 416	Introduction to Computer Science II	4
CS 420	Foundations of Programming for Digital Systems	4
IT 403	Introduction to Internet Technologies	4
CS 501	Professional Ethics and Communication in Technology-related Fields	4
CS 515	Data Structures and Introduction to Algorithms	4
CS 518	Introduction to Software Engineering	4
CS 520	Computer Organization and System-Level Programming	4
CS 527	Fundamentals of Cybersecurity	4
CS 791 & CS 792	Senior Project I and Senior Project II	4
or CS 799	Thesis	
Computer Science Electives [1]		
Select four courses from the following:		16
CS 550	Foundations of Machine Learning	
CS 619	Introduction to Object-Oriented Design and Development	
CS 674	Fundamentals of Statistical Learning I	
CS 675	Fundamentals of Statistical Learning II	
CS 730	Introduction to Artificial Intelligence	
CS 733	Mobile Robotics	
CS 750	Machine Learning	
CS 751	Reinforcement Learning	
CS 752	Foundations of Neural Networks	
CS 753	Information Retrieval and Generation Systems	
CS 755	Computer Vision	
CS 757	Mathematical Optimization for Applications	
CS 758	Algorithms	
CS 759	Natural Language Processing	
CS 781	Data Science for Knowledge Graphs and Text	
Mathematics Courses		
MATH 425	Calculus I	4
MATH 531	Mathematical Proof	4
MATH 539	Introduction to Statistical Analysis	4
or MATH 540	Probability & Statistics	
or MATH 644	Statistics for Engineers and Scientists	
CS 659	Introduction to the Theory of Computation	4
Science Courses [2]		
One Discovery Biological Science (BS) with Discovery Lab		4
One Discovery Physical Science (PS) with Discovery Lab		4
Discovery requirements not already covered by required courses		20

[1] CS 619, CS 757 and CS 758 cover computational and mathematical methods that are important in artificial intelligence.
[2] Courses must carry the Discovery attributes of Biological Science or Physical Science and include Discovery lab (DLAB).

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
IT 403	Introduction to Internet Technologies	4
MATH 425	Calculus I	4
Discovery Course (or Foreign Language)		4
	Credits	**18**
Spring		
CS 416	Introduction to Computer Science II	4
CS 420	Foundations of Programming for Digital Systems	4
MATH 539 or MATH 531	Introduction to Statistical Analysis or Mathematical Proof	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Second Year		
Fall		
CS 515	Data Structures and Introduction to Algorithms	4
CS 518 or CS 527	Introduction to Software Engineering or Fundamentals of Cybersecurity	4
CS 501	Professional Ethics and Communication in Technology-related Fields (or Discovery Course)	4
MATH 531 or MATH 539	Mathematical Proof or Introduction to Statistical Analysis	4
	Credits	**16**
Spring		
CS 520	Computer Organization and System-Level Programming	4
CS 527 or CS 518	Fundamentals of Cybersecurity or Introduction to Software Engineering	4
Discovery Course (or CS 501)		4
Discovery Course (or Foreign Language)		4
	Credits	**16**
Third Year		
Fall		
CS 659	Introduction to the Theory of Computation	4
CS Elective Course		4
General Elective Course		4
Discovery Course		4
	Credits	**16**
Spring		
CS Elective Course		4
Discovery Course		4
General Elective Course		4
General Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
CS 791	Senior Project I	2
CS Elective Course		4
Discovery Course		4
General Elective Course		4
General Elective Course		4
	Credits	**18**
Spring		
CS 792	Senior Project II	2
CS Elective Course		4
Discovery Course		4
General Elective Course		4
	Credits	**14**
	Total Credits	**130**

Discovery Course: Historical Perspectives, Humanities, Fine and Performing Arts, Social Science, World Cultures, Physical Science Discovery Lab, Biological Science Discovery Lab.

One Discovery or General Elective course must have the Writing Intensive (WI) attribute.

Student Learning Outcomes

Program Learning Outcomes

Graduates of the UNH B.A. CS programs will have an ability to:

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply computer science theory and software development fundamentals to produce computing-based solutions.
- Learn independently about new technologies, and have the skills needed to understand them.

Computer Science Major: Cybersecurity Option (B.A.)

https://www.unh.edu/program/bachelor-arts/computer-science-cybersecurity

Description

The B.A. in Computer Science will allow students to combine the study of computer science with the study of another field. Given the emergence of computational approaches to virtually all areas of scholarship and creative expression, it is important to offer this flexibility. The three tracks in the B.A. program contain the same computer science core as the B.S. program, but give more control to the student to choose the complementary and advanced courses.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Computer science majors must maintain an overall grade-point average of 2.0 or better in all required computer science, mathematics, and computer engineering courses in order to graduate. If at the end of any semester, including the first, a student's cumulative grade-point average in these courses falls below 2.0, the student may not be allowed to continue as a CS major.

The following courses or their equivalents must be completed with a grade of C- or better in order to meet the CS major requirements: CS 415, CS 416, CS 420, CS 515, CS 520, and IT 403.

Students are expected to demonstrate consistent progress towards the satisfaction of the core degree requirements and are allowed two repeats of the aforementioned courses before being subject to removal from the program. This can be a single class repeated twice or two classes repeated once. Students may petition to be reinstated after one-year absence from the program.

If a student wishing to transfer into the computer science major has any coursework that is applicable to the major, the grades in those courses must satisfy the minimum grade requirements for the B.S. degree in computer science. The student must have an overall grade-point average of 2.0 or better in all courses taken at the university.

Code	Title	Credits
Computer Science Classes		
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
or CS 410C	Introduction to Scientific Programming/C	
or CS 410P	Introduction to Scientific Programming/Python	
CS 416	Introduction to Computer Science II	4
CS 420	Foundations of Programming for Digital Systems	4
IT 403	Introduction to Internet Technologies	4
CS 501	Professional Ethics and Communication in Technology-related Fields	4
CS 515	Data Structures and Introduction to Algorithms	4
CS 520	Computer Organization and System-Level Programming	4
CS 527	Fundamentals of Cybersecurity	4
CS 620	Operating System Fundamentals	4
CS 727	Software Security	4
IT 666	Cybersecurity Practices	4
CS 791 & CS 792	Senior Project I and Senior Project II	4
or CS 799	Thesis	
Computer Science Electives		
Select one course from the following:		4
CS 720	Systems Programming	
CS 722	Cloud Computing Systems	
CS 725	Computer Networks	
IT 609	Network/Systems Administration	
IT 718	Cloud Computing Principles	
Mathematics Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 539	Introduction to Statistical Analysis	4
or MATH 540	Probability & Statistics	
or MATH 644	Statistics for Engineers and Scientists	
Select two courses from the following:		8
CS 659	Introduction to the Theory of Computation	
MATH 420	Finite Mathematics	
MATH 426	Calculus II	
or MATH 426H	Honors/Calculus II	
MATH 445	Mathematics and Applications with MATLAB	
Any MATH 500-level course or higher		
Science Courses [1]		
One Discovery Biological Science (BS) with Discovery Lab		4
One Discovery Physical Science (PS) with Discovery Lab		4
Discovery requirements not already covered by required courses		20
Total Credits		**98**

[1] Courses must carry the Discovery attributes of Biological Science or Physical Science and include Discovery lab (DLAB).

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
IT 403	Introduction to Internet Technologies	4
MATH 425	Calculus I	4
Discovery I (or Foreign Language)		4
	Credits	**18**
Spring		
CS 416	Introduction to Computer Science II	4

CS 420	Foundations of Programming for Digital Systems	4
MATH 539 or MATH 540 or MATH 644	Introduction to Statistical Analysis or Probability & Statistics or Statistics for Engineers and Scientists	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Second Year		
Fall		
CS 515	Data Structures and Introduction to Algorithms	4
CS 527	Fundamentals of Cybersecurity	4
CS 501	Professional Ethics and Communication in Technology-related Fields (or Discovery II)	4
Discovery III (or Foreign Language)		4
	Credits	**16**
Spring		
CS 520	Computer Organization and System-Level Programming	4
MATH Elective I		4
Discovery II (or CS 501)		4
Discovery IV		4
	Credits	**16**
Third Year		
Fall		
CS 620	Operating System Fundamentals	4
IT 666	Cybersecurity Practices	4
MATH Elective II		4
Discovery V		4
	Credits	**16**
Spring		
CS 727	Software Security	4
Discovery VI		4
General Elective I		4
General Elective II		4
	Credits	**16**
Fourth Year		
Fall		
CS 791	Senior Project I	2
CS 700-level Elective I		4
Discovery VII		4
General Elective III		4
General Elective IV		4
	Credits	**18**
Spring		
CS 792	Senior Project II	2
CS 700-level Elective II		4
General Elective V		4
General Elective VI		4
	Credits	**14**
	Total Credits	**130**

Discovery (7): Historical Perspectives, Humanities, Fine and Performing Arts, Social Science, World Cultures, Physical Science Discovery Lab, Biological Science Discovery Lab.

Two Discovery or General Elective courses must have the Writing Intensive (WI) attribute.

Student Learning Outcomes

Program Learning Outcomes

Graduates of the UNH B.A. CS programs will have an ability to:

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply computer science theory and software development fundamentals to produce computing-based solutions.
- Learn independently about new technologies, and have the skills needed to understand them.

Computer Science Major: Systems Option (B.A.)

https://www.unh.edu/program/bachelor-arts/computer-science-systems

Description

The B.A. in Computer Science will allow students to combine the study of computer science with the study of another field. Given the emergence of computational approaches to virtually all areas of scholarship and creative expression, it is important to offer this flexibility. The three tracks in the B.A. program contain the same computer science core as the B.S. program, but give more control to the student to choose the complementary and advanced courses.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Computer science majors must maintain an overall grade-point average of 2.0 or better in all required computer science, mathematics, and computer engineering courses in order to graduate. If at the end of any semester, including the first, a student's cumulative grade-point average in these courses falls below 2.0, the student may not be allowed to continue as a CS major.

The following courses or their equivalents must be completed with a grade of C- or better in order to meet the CS major requirements: CS 415, CS 416, CS 420, CS 515, CS 520, and IT 403.

Students are expected to demonstrate consistent progress towards the satisfaction of the core degree requirements and are allowed two repeats of the aforementioned courses before being subject to removal from the program. This can be a single class repeated twice or two classes repeated once. Students may petition to be reinstated after a one-year absence from the program.

If a student wishing to transfer into the computer science major has any coursework that is applicable to the major, the grades in those courses must satisfy the minimum grade requirements for the B.S. degree in computer science. The student must have an overall grade-point average of 2.0 or better in all courses taken at the university.

Code	Title	Credits
Computer Science Courses		
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
or CS 410C	Introduction to Scientific Programming/C	
or CS 410P	Introduction to Scientific Programming/Python	
CS 416	Introduction to Computer Science II	4
CS 420	Foundations of Programming for Digital Systems	4
IT 403	Introduction to Internet Technologies	4
CS 501	Professional Ethics and Communication in Technology-related Fields	4
CS 515	Data Structures and Introduction to Algorithms	4
CS 518	Introduction to Software Engineering	4
CS 520	Computer Organization and System-Level Programming	4
CS 527	Fundamentals of Cybersecurity	4
CS 619	Introduction to Object-Oriented Design and Development	4
CS 620	Operating System Fundamentals	4
Capstone		
CS 791 & CS 792	Senior Project I and Senior Project II	4
or CS 799	Thesis	
Computer Science Electives		
Select two additional CS courses numbered 690-799		8
Mathematics Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 539	Introduction to Statistical Analysis	4
or MATH 540	Probability & Statistics	
or MATH 644	Statistics for Engineers and Scientists	
Select two courses from the following:		8
CS 659	Introduction to the Theory of Computation	
MATH 420	Finite Mathematics	
MATH 426	Calculus II	
or MATH 426H	Honors/Calculus II	
MATH 445	Mathematics and Applications with MATLAB	
Any MATH 500-level course or higher		
Science Courses [1]		
One Discovery Biological Science (BS) with Discovery Lab		4
One Discovery Physical Science (PS) with Discovery Lab		4
Discovery requirements not already covered by required courses		20
Total Credits		**102**

[1] Courses must carry the Discovery attributes of Biological Science or Physical Science and include Discovery lab (DLAB).

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
IT 403	Introduction to Internet Technologies	4
MATH 425	Calculus I	4
Discovery I (or Foreign Language)		4
	Credits	**18**
Spring		
CS 416	Introduction to Computer Science II	4
CS 420	Foundations of Programming for Digital Systems	4
MATH 539	Introduction to Statistical Analysis	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Second Year		
Fall		
CS 515	Data Structures and Introduction to Algorithms	4
CS 518 or CS 527	Introduction to Software Engineering or Fundamentals of Cybersecurity	4
CS 501	Professional Ethics and Communication in Technology-related Fields (or Discovery II)	4
Discovery II (or Foreign Language)		4
	Credits	**16**
Spring		
CS 520	Computer Organization and System-Level Programming	4
CS 527 or CS 518	Fundamentals of Cybersecurity or Introduction to Software Engineering	4
MATH Elective I		4
Discovery III (or CS 501)		4
	Credits	**16**
Third Year		
Fall		
CS 619	Introduction to Object-Oriented Design and Development	4
CS 620	Operating System Fundamentals	4
MATH Elective II		4
Discovery IV		4
	Credits	**16**

Spring		
CS 700-level Elective I		4
CS 700-level Elective II		4
Discovery V		4
General Elective I		4
	Credits	**16**
Fourth Year		
Fall		
CS 791	Senior Project I	2
Discovery VI		4
General Elective II		4
General Elective III		4
General Elective IV		4
	Credits	**18**
Spring		
CS 792	Senior Project II	2
Discovery VII		4
General Elective V		4
General Elective VI		4
	Credits	**14**
	Total Credits	**130**

Discovery (7): Historical Perspectives, Humanities, Fine and Performing Arts, Social Science, World Cultures, Physical Science Discovery Lab, Biological Science Discovery Lab.

Two Discovery or General Elective courses must have the Writing Intensive (WI) attribute.

Student Learning Outcomes

Program Learning Outcomes

Graduates of the UNH B.A. CS programs will have an ability to:

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply computer science theory and software development fundamentals to produce computing-based solutions.
- Learn independently about new technologies, and have the skills needed to understand them.

Computer Science Minor

https://www.unh.edu/program/minor/computer-science

Description

The minor in computer science is designed for students in other majors who want to learn the fundamentals of designing and implementing computer software.

Students interested in the Computer Science minor should contact Arvind.Narayan@unh.edu for more information.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Requirements		
CS 415	Introduction to Computer Science I	4
or CS 410C	Introduction to Scientific Programming/C	
or CS 410P	Introduction to Scientific Programming/Python	
CS 416	Introduction to Computer Science II	4
or CS 417	From Programs to Computer Science	
CS 420	Foundations of Programming for Digital Systems	4
CS 515	Data Structures and Introduction to Algorithms	4
Other Courses		
Select one of the following:		4
CS 619	Introduction to Object-Oriented Design and Development	
CS 520	Computer Organization and System-Level Programming	
CS 620	Operating System Fundamentals	
CS 659	Introduction to the Theory of Computation [1]	
CS 761	Programming Language Concepts and Features	
An approved CS 700-level course		

[1] CS 659 Introduction to the Theory of Computation has mathematics prerequisites: MATH 425 Calculus I, MATH 426 Calculus II, and MATH 531 Mathematical Proof.

Cybersecurity Minor

https://www.unh.edu/program/minor/cybersecurity

Description

The cybersecurity minor is designed to teach students about the risks faced by the software and hardware that they use every day, and learn how to protect themselves in an increasingly-hostile digital world. Technology has become a critical component of nearly every aspect of our lives, and this minor lets students work with the tools and techniques used by security professionals to both attack and defend these systems.

Requirements

Academic policies related to Minors.

Credit toward the minor will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the minor.

This minor may not be declared with the following majors:

- Computer Science Major: Cybersecurity Option (B.A.)
- Information Technology Major (B.S.)

Code	Title	Credits
Required Courses		
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
or CS 410C	Introduction to Scientific Programming/C	
or CS 410P	Introduction to Scientific Programming/Python	
CS 527	Fundamentals of Cybersecurity	4
IT 666	Cybersecurity Practices	4
Electives		
Select two courses from the following:		8
CS 420	Foundations of Programming for Digital Systems	
CS 520	Computer Organization and System-Level Programming	
CS 727	Software Security	
IT 520	Foundations of Information Technology	
IT 718	Cloud Computing Principles	
HLS 410	Introduction to Homeland Security	
HLS 415	Fundamentals of Corporate Security	
HLS 455	Introduction to Cybersecurity	
HLS 515	Critical Infrastructure Security and Resilience	
BIOL 420	Introduction to Forensic Sciences	
JUST 405	Technology, Crime, and Society: A Forensic Exploration of High-Tech and Digital Crime	
Total Credits		**22**

Data Science Major (B.S.)

https://www.unh.edu/program/bachelor-science/data-science

Description

The BS in Data Science is intended for students interested in pursuing advanced degrees and conducting original research in data science. The program places its emphasis on a rigorous introduction to the theoretical mathematical and computational underpinnings of modern data science.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Successful completion of the degree program includes earning a minimum of 128 credits, meeting the requirements of the University's Discovery Program, completing all of the 20 required courses in the major as listed below, capstone course, and a minor approved by the advisor.

The following courses or their equivalents must be passed with a grade of C- or better in order to meet the Data Science major requirements: CS 415, CS 416, CS 420, CS 457,and CS 515.

Students are expected to demonstrate consistent progress towards the satisfaction of the core degree requirements and are allowed two repeats of the aforementioned courses before being removed from the program. This can be a single class repeated twice or two classes repeated once. Students may petition to be reinstated after one year out of the program.

Transfer students may transfer up to a maximum of 32 credits to satisfy major requirements (not counting those courses used to satisfy Discovery requirements).

Code	Title	Credits
Required Courses		
Mathematics		
MATH 425	Calculus I	4
MATH 426	Calculus II	4
MATH 528	Multidimensional Calculus	4
MATH 531	Mathematical Proof	4
MATH 539	Introduction to Statistical Analysis	4
or MATH 540	Probability & Statistics	
or MATH 644	Statistics for Engineers and Scientists	
MATH 645	Linear Algebra for Applications	4
or MATH 545	Introduction to Linear Algebra	
MATH 755	Probability with Applications	4
MATH 756	Principles of Statistical Inference	4
Computer Science		
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
or CS 410P	Introduction to Scientific Programming/Python	
CS 416	Introduction to Computer Science II	4
CS 420	Foundations of Programming for Digital Systems	4
CS 457	Introduction to Data Science and Analytics	4
CS 515	Data Structures and Introduction to Algorithms	4
CS 659	Introduction to the Theory of Computation	4
CS 674 & CS 675	Fundamentals of Statistical Learning I and Fundamentals of Statistical Learning II	8
or CS 674 & CS 750	Fundamentals of Statistical Learning I and Machine Learning	
CS 758	Algorithms	4
IT 630	Data Science and Scalable Data Systems	4
or CS 775	Database Systems	
Capstone		
CS 791 & CS 792	Senior Project I and Senior Project II	4
or CS 799	Thesis	
Minor		
Select one of the following approved Minors:		20
Applied Mathematics Minor		
Statistics Minor		
Economics Minor		
Artificial Intelligence Minor		
Total Credits		**98**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
CS 457	Introduction to Data Science and Analytics	4
MATH 425	Calculus I	4

ENGL 401	First-Year Writing	4
	Credits	**18**
Spring		
CS 416	Introduction to Computer Science II	4
CS 420	Foundations of Programming for Digital Systems	4
MATH 426	Calculus II	4
MATH 539 or MATH 644	Introduction to Statistical Analysis or Statistics for Engineers and Scientists	4
	Credits	**16**
Second Year		
Fall		
CS 515	Data Structures and Introduction to Algorithms	4
CS 674	Fundamentals of Statistical Learning I	4
MATH 531	Mathematical Proof	4
Discovery Lab		4
	Credits	**16**
Spring		
MATH 528	Multidimensional Calculus	4
MATH 645 or MATH 545	Linear Algebra for Applications or Introduction to Linear Algebra	4
CS 659	Introduction to the Theory of Computation	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
CS 758	Algorithms	4
IT 630	Data Science and Scalable Data Systems	4
MATH 755	Probability with Applications	4
Minor Elective I		4
	Credits	**16**
Spring		
CS 675	Fundamentals of Statistical Learning II	4
MATH 756	Principles of Statistical Inference	4
Minor Elective II		4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
CS 791	Senior Project I	2
Minor Elective III		4
Minor Elective IV		4
Discovery Course		4
Discovery Course		4
	Credits	**18**
Spring		
CS 792	Senior Project II	2
Minor Elective V		4
Discovery Course		4
Discovery Course		4
	Credits	**14**
	Total Credits	**130**

Student Learning Outcomes

Program Learning Outcomes

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply theory, techniques, and tools throughout the data analysis lifecycle and employ the resulting knowledge to satisfy stakeholders' needs.

Data Science Minor

https://www.unh.edu/program/minor/data-science

Description

The objective of this minor is to provide a basic background in data science for those who are more interested in the theoretical underpinnings of analytics and data science.

Students interested in the Data Science minor should contact matthew.magnusson@unh.edu for more information.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
CS 415	Introduction to Computer Science I	4
or CS 410C	Introduction to Scientific Programming/C	
or CS 410P	Introduction to Scientific Programming/Python	
or DS 662	Programming for Business	
Select one course from the following:		4
CS 674	Fundamentals of Statistical Learning I	
CS 750	Machine Learning	
MATH 738	Data Mining and Predictive Analytics	
Select one course from the following:		4
ADMN 510	Business Analytics and Statistics	
BIOL 528	Applied Biostatistics I	
BUS 430	Introduction to Business Statistics	
MATH 439	Statistical Discovery for Everyone	
MATH 539	Introduction to Statistical Analysis	
MATH 644	Statistics for Engineers and Scientists	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	
Select two courses from the following:		8
CS 674	Fundamentals of Statistical Learning I	
CS 675	Fundamentals of Statistical Learning II	

CS 730	Introduction to Artificial Intelligence	
CS 733	Mobile Robotics	
CS 750	Machine Learning	
CS 751	Reinforcement Learning	
CS 753	Information Retrieval and Generation Systems	
CS 757	Mathematical Optimization for Applications	
CS 755	Computer Vision	
CS 759	Natural Language Processing	
CS 775	Database Systems	
CS 781	Data Science for Knowledge Graphs and Text	
IT 630	Data Science and Scalable Data Systems	
MATH 632	Financial Mathematics	
MATH 645	Linear Algebra for Applications	
MATH 736	Advanced Statistical Modeling	
MATH 737	Statistical Methods for Quality Improvement and Design	
MATH 740	Design of Experiments I	
MATH 741	Survival Analysis	
MATH 743	Time Series Analysis	
MATH 744	Design of Experiments II	
MATH 767	One-Dimensional Real Analysis	
MATH 768	Real Analysis II	
MATH 770	Foundations of Number Theory	
MATH 772	Combinatorics	
MATH 784	Topology	
MATH 738	Data Mining and Predictive Analytics	
MATH 739	Applied Regression Analysis	
Total Credits		**20**

Information Technology Cognate

https://www.unh.edu/program/cognate/information-technology

Description

The Toolbox Cognate in Information Technology is designed to provide students with knowledge and skills required by essentially any job today.

With introductory level options, including courses from outside the department, the cognate is of value to students who wish to get a firm foundation in areas related to computing and information technology. The cognate also gives students considering study of Information Technology or Computer Science an opportunity to sample a broad range of courses in the field.

The cognate will appear on each student's transcript.

Requirements

Credit toward the cognate will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the cognate. Courses taken on a pass/fail basis may not be used for the cognate.

Students submit a cognate certificate of completion form at the beginning of their final semester.

The cognate consists of selecting three courses (12 credits total) from the below. No more than two courses may be taken from the same category. Note: some courses may have prerequisites.

Code	Title	Credits
Web Courses		
IT 403	Introduction to Internet Technologies	4
IT 502	Intermediate Web Design	4
Computing/Programming Courses		
CS 410C	Introduction to Scientific Programming/C	4
or CS 410P	Introduction to Scientific Programming/Python	
MATH 445	Mathematics and Applications with MATLAB	4
IT 505	Integrative Programming	4
IT 520	Foundations of Information Technology	4
Statistics Courses		
MATH 439	Statistical Discovery for Everyone	4
MATH 539	Introduction to Statistical Analysis	4

Information Technology Major (B.S.)

https://www.unh.edu/program/bachelor-science/information-technology

Description

Information technology is concerned primarily with the application of existing computing technologies to the information needs of organizations and individual computer users. The IT program aims to provide graduates with the skills and knowledge to take on appropriate professional positions in information technology upon graduation and grow into leadership positions in the field. Potential careers include network administrator, database developer, system administrator, and webmaster.

The educational objectives of the B.S. Information Technology program are to:

1. Apply the full range of core IT concepts and techniques to fill the IT needs of an organization and be prepared to assume managerial and other advanced responsibilities,
2. Confront new problems effectively and anticipate the changing directions of technology,
3. Communicate effectively with diverse stakeholders as well as function appropriately in a team environment,
4. Navigate within the complex relationships between IT and larger organizational goals, and
5. Understand the pervasive and changing role of computing technology in global society, and participate responsibly as both IT professional and citizen.

The Bachelor of Science in Information Technology program is accredited by the Computing Accreditation Commission of ABET, under the commission's General Criteria and Program Criteria for Information Technology and Similarly Named Computing Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Information technology majors must maintain an overall grade-point average of 2.0 or better in all required information technology and computer science required courses in order to graduate. If at the end of any semester, including the first, a student's cumulative grade-point average in these courses falls below 2.0, the student may not be allowed to continue as an IT major. The following courses or their equivalents must be passed with a grade of C- or better in order to meet the IT major requirements: CS 415, CS 417, IT 403, IT 505, and IT 520.

Students are expected to demonstrate consistent progress towards the satisfaction of the core degree requirements and are allowed two repeats of the aforementioned courses before being removed from the program. This can be a single class repeated twice or two classes repeated once. Students may petition to be reinstated after one year out of the program.

If a student wishing to transfer into the Information Technology major has any coursework that is applicable to the major, the grades in those courses must satisfy the minimum grade requirements for the B.S. degree in Information Technology. The student must have an overall grade-point average of 2.0 or better in all courses taken at the University.

In addition to the core IT requirements, each student must complete a complementary set of courses in a particular domain outside of IT to which the student's IT skills can be applied. This set of courses can be completed in one of the following ways: (1) An approved minor; or (2) A second major or UNH dual degree. *A list of preapproved minors is available from the CS Department and requires at least (5) courses to complete.*

Code	Title	Credits
Required Courses		
Information Technology Courses		
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
or CS 410C	Introduction to Scientific Programming/C	
or CS 410P	Introduction to Scientific Programming/Python	
CS 417	From Programs to Computer Science	4
CS 501	Professional Ethics and Communication in Technology-related Fields	4
CS 518	Introduction to Software Engineering	4
CS 527	Fundamentals of Cybersecurity	4
IT 403	Introduction to Internet Technologies	4
IT 505	Integrative Programming	4
IT 520	Foundations of Information Technology	4
IT 609	Network/Systems Administration	4
IT 699	Internship	1
IT 705	Project Management for Information Technology	4
IT 760W	Human-Computer Interaction	4
IT 775	Database Technology	4
IT 791 & IT 792	Senior Project I and Senior Project II	4
IT Electives		
Select three courses from the following:		12
IT 502	Intermediate Web Design	
IT 604	Server-side Web Development	
IT 605	Full-Stack Web Development	
IT 612	Scripting Languages	
IT 630	Data Science and Scalable Data Systems	
IT 666	Cybersecurity Practices	
IT 718	Cloud Computing Principles	
IT 725	Network Technology	
IT 780	Topics in Information Technology	
Mathematics Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 539	Introduction to Statistical Analysis	4
Science Courses [1]		
One Discovery Biological Science (BS) with Discovery Lab		4
One Discovery Physical Science (PS) with Discovery Lab		4
Other Courses		
Discovery requirements not already covered by required courses		24
General Electives		2-4
Minor, Second Major, or Dual Degree		20
Total Credits		**129-131**

[1] Courses must carry the Discovery attributes of Biological Science or Physical Science and include Discovery lab (DLAB).

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CS 400	Introduction to Computing	2
CS 415	Introduction to Computer Science I	4
IT 403	Introduction to Internet Technologies	4
MATH 425	Calculus I	4
Discovery		4
	Credits	**18**
Spring		
CS 417	From Programs to Computer Science	4
ENGL 401	First-Year Writing (Discovery)	4
Discovery		4
Physical Science (DLAB)		4
	Credits	**16**
Second Year		
Fall		
IT 505	Integrative Programming	4
IT 520	Foundations of Information Technology	4
CS 501	Professional Ethics and Communication in Technology-related Fields	4
Discovery		4
	Credits	**16**
Spring		
CS 518	Introduction to Software Engineering	4
CS 527	Fundamentals of Cybersecurity	4
MATH 539	Introduction to Statistical Analysis	4
Biological Science (DLAB)		4
	Credits	**16**
Third Year		
Fall		
IT 609	Network/Systems Administration	4
IT 705	Project Management for Information Technology	4
IT 760W	Human-Computer Interaction	4
Minor (1 of 5)		4
	Credits	**16**

Spring		
IT 699	Internship	1
IT 775	Database Technology	4
IT Elective (1 of 3)		4
Minor (2 of 5)		4
Discovery		4
	Credits	**17**
Fourth Year		
Fall		
IT 791	Senior Project I	2
IT Elective (2 of 3)		4
Minor (3 of 5)		4
Discovery		4
Free Elective (optional)		
	Credits	**14**
Spring		
IT 792	Senior Project II	2
IT Elective (3 of 3)		4
Minor (4 of 5)		4
Minor (5 of 5)		4
Free Elective or Fourth Writing Intensive		4
	Credits	**18**
	Total Credits	**131**

Student Learning Outcomes

Students will be able to:

- Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Use systemic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals.
- Self-learning skills, exposure to technologies new to the students, practice in understanding those technologies on their own.

Information Technology Minor

https://www.unh.edu/program/minor/information-technology

Description

The information technology (IT) minor is a way for students in non-technical majors to bridge the gap between a primarily non-technical education and a technical world. Graduates from a variety of fields are discovering that there is a great need to have computer competency in addition to the knowledge they gain in their major; the IT minor, which is tailored to grow students' understanding of computer and information technology applications, helps prepare students for the future.

For additional information regarding the IT minor, please contact Michael.Gildersleeve@unh.edu.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
CS 400	Introduction to Computing	2
Programming Course		
Select one course from the following: [1]		4
CS 410C	Introduction to Scientific Programming/C	
CS 410P	Introduction to Scientific Programming/Python	
CS 415	Introduction to Computer Science I	
Electives		
Select four courses from the following: [1]		16
CS 417	From Programs to Computer Science	
CS 518	Introduction to Software Engineering	
CS 527	Fundamentals of Cybersecurity	
IT 403	Introduction to Internet Technologies	
IT 502	Intermediate Web Design	
IT 505	Integrative Programming	
IT 520	Foundations of Information Technology	
IT 605	Full-Stack Web Development	
IT 609	Network/Systems Administration	
IT 612	Scripting Languages	
IT 630	Data Science and Scalable Data Systems	
IT 666	Cybersecurity Practices	
Total Credits		**22**

[1] Other courses are eligible by permission of the minor coordinator.

Earth Sciences

Earth sciences are vital to understanding our dynamic Earth, ocean, and atmosphere; our changing climate; and how to create a sustainable future. The Department of Earth Sciences offers three majors: the B.S. Earth Sciences, with specializations in Geosciences and Ocean Sciences, the B.S. Environmental Sciences: Earth Systems option, and the B.A. Earth and Environmental Sciences. All of our degree programs provide a strong concentration in Earth sciences that is built upon a solid foundation in mathematics and the physical sciences.

All of our undergraduate degrees are especially well-suited for students who wish to work in the environmental and geosciences industries, energy sector and climate technologies, teaching at the secondary level, state and federal environmental agencies, or to pursue graduate studies in the Earth, environmental, and climate sciences, oceanography, and related fields of study. Students are encouraged to participate in research, field, lab, or internship opportunities to round out their experiences in the degree program.

In addition to the B.S. and B.A. degrees, the Department of Earth Sciences also offers three minors: Earth and Environmental Sciences, Climate Science, and Ocean Sciences.

Descriptions and requirements for the majors and minors are arranged alphabetically.

https://ceps.unh.edu/earth-sciences

Programs

- Climate Science Minor (p. 119)
- Earth and Environmental Sciences Major (B.A.) (p. 119)
- Earth and Environmental Sciences Minor (p. 122)
- Earth Sciences Major (B.S.) (p. 122)
- Environmental Sciences Major: Earth Systems Option (B.S.) (p. 126)
- Ocean Sciences Minor (p. 128)

Faculty

Earth Sciences Department Faculty

Climate Science Minor

https://www.unh.edu/program/minor/climate-science

Description

The Department of Earth Sciences offers a minor in Climate Science available to all University students. The Climate Science minor provides an opportunity for students to complement their major field of study with foundational knowledge and essential skills in Climate Science.

Students interested in the Climate Science minor should contact rosemarie.came@unh.edu for more information.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
ESCI 401	Dynamic Earth	4
or ESCI 402	Earth History	
or ESCI 405	Global Environmental Change	
or ESCI 409	Geology and the Environment	
or ESCI 501	Introduction to Oceanography	
ESCI 514	Introduction to Climate	3
Climate and Society Course		
Complete one approved 500/600 level course. Suggested courses include: [1]		4
SOC 565	Environment and Society	
SOC 665	Environmental Sociology	
SOC 693	Global Change and Social Sustainability	
GEOG 405	There Is No Planet B	
GEOG 473	Elements of Weather	
GEOG 574	Global Landscapes and Environmental Processes	
CEE 520	Environmental Pollution and Protection: A Global Context	
Quantitative/Statistics Course		
Select one course from the following:		4
ESCI 701	Quantitative Methods in Earth Sciences	
ESCI 764	Spectral Analysis of Geophysical Time Series Data	
MATH 539	Introduction to Statistical Analysis	
BIOL 528	Applied Biostatistics I	
CS 457	Introduction to Data Science and Analytics	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	
HMP 540	Statistics for Health and Human Service Professionals	
ADMN 510	Business Analytics and Statistics	
ESCI Climate Science Course		
Select one course from the following:		3-4
ESCI 561	Landscape Evolution	
ESCI 642	Biogeosciences in the Earth System	
ESCI 705	Principles of Hydrology	
ESCI 758	Introductory Physical Oceanography	
ESCI 760	Paleoceanography	
ESCI 765	Paleoclimatology	
ESCI 777	GIS for Earth & Environmental Sciences	
ESCI 778	Remote Sensing Earth & Environmental Sciences	
Total Credits		**18-19**

[1] The course meeting the climate and society requirement should be selected in consultation with the Climate Science Minor advisor.

Student Learning Outcomes

Program Learning Outcomes

- Understand the broad attributes of and interactions within the Earth System.
- Describe the history of Earth's climate, how and why the climate is changing today, and how those changes impact society.
- Perform simple statistical calculations to process and evaluate quantitative climate science data.
- Summarize, analyze, and evaluate the primary climate sciences literature.

Earth and Environmental Sciences Major (B.A.)

https://www.unh.edu/program/bachelor-arts/earth-environmental-sciences

Description

The Bachelor of Arts degree in the Department of Earth Sciences provides students an opportunity to obtain a broad education and a general background in the Earth sciences with a greater degree of freedom in choosing electives than in the B.S. programs. This B.A. degree nicely complements other majors and minors and by careful choice of electives, students can prepare for graduate or professional school and careers in education, resource management and sustainability, environmental consulting, government, business, the non-profit sector, and public service.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.

**Major GPA requirements as indicated.*

Major Requirements

A minimum grade of C- is required in major coursework.

Code	Title	Credits
Required Courses [1]		
ESCI 401	Dynamic Earth	4
or ESCI 409	Geology and the Environment	
ESCI 402	Earth History	4
or ESCI 501	Introduction to Oceanography	
or ESCI 405	Global Environmental Change	
or ESCI 420	Our Solar System	
or NR 403	Introduction to Environmental Science	
ESCI 512	Principles of Mineralogy	4
or NR 501	Studio Soils	
ESCI 561	Landscape Evolution	4
Advanced Level Courses		
Select three ESCI courses		9-12
ESCI courses must be numbered 514 or higher and two courses must be at the 700-level. [2]		
Select one additional course [3]		3-4
Mathematics and Science Courses [4]		
MATH 425	Calculus I	4
or MATH 424B	Calculus for Life Sciences	
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
or MATH 539	Introduction to Statistical Analysis	
or BIOL 528	Applied Biostatistics I	
or CS 457	Introduction to Data Science and Analytics	
CHEM 403	General Chemistry I	4
Elective Courses		
Select additional general elective courses to complete a total of 128 credits. [5]		28
Professional Development		
ESCI 400	First-year Experience	1
ESCI 690	Capstone & Professional Development	1
Capstone Experience		
See below list of suggested capstone experiences		
Total Credits		**70-74**

1. The following courses cannot be taken to fulfill Discovery Program requirements for majors in the Department of Earth Science: ESCI 401, ESCI 402, ESCI 405, ESCI 409, ESCI 420, ESCI 501.
2. Recommended Earth Sciences courses include ESCI 530 Geological Field Methods or ESCI 534 Techniques in Environmental Sciences.
3. ESCI course numbered at/above 514, or NR course numbered at/above 501, or GEOG 560, GEOG 572, GEOG 574, GEOG 670.
4. Other recommended science courses include: CHEM 404, PHYS 407 & PHYS 408 or PHYS 401 & PHYS 402, second semester Biology BIOL 411 or BIOL 412.
5. A minor, second or dual major, additional foundational or Earth Sciences courses should be considered.

It is strongly advised that students complete, as early as possible, a year each of college chemistry and physics.

Capstone Experience

A capstone experience is required of all undergraduate Earth sciences majors during their senior year. All capstone experiences at UNH must meet one or more of the following criteria:

1. The capstone synthesizes and applies disciplinary knowledge and skills.
2. The capstone fosters reflection on undergraduate learning and experience.
3. The capstone demonstrates emerging professional competencies.
4. The capstone applies, analyzes, and/or interprets research or data or artistic expression.
5. The capstone explores areas of interest based on the integration of prior learning.

Suggested ways of meeting the capstone requirement in the Department of Earth Sciences include: approved INCO 790 Advanced Research Experience, ESCI 795 Topics/ESCI 796 Topics field courses, ESCI 799 Senior Thesis, URA/SURF/IROP projects, internships, environmental/geologic field camps, REU programs, or Earth Sciences education and outreach activities designed according to the above criteria.

Capstone experiences must be equivalent to a minimum of 2 academic credits. Students should work closely with their faculty advisors to define the most appropriate capstone experience for their Earth Sciences degree program, although the capstone mentor can be someone other than their primary faculty advisor. All capstone experiences must be approved and certified by the faculty advisor and the capstone mentor. Presentation of projects or experiences developed for the capstone is encouraged at the annual UNH Undergraduate Research Conference or other appropriate venue.

B.A. Foreign Language Proficiency Requirement

The Bachelor of Arts degree requires proficiency in a foreign language. This requirement may be fulfilled by completing the equivalent of a full-year elementary-level course in a language not previously studied, or by completing the equivalent of a semester of a course in a foreign language at the intermediate or higher level, or by earning credit through an approved Advanced Placement or College Board foreign language achievement test (minimum scores vary). The proficiency in a foreign language requirement must be satisfied by the end of the sophomore year. No credit is awarded for elementary year college coursework if the student has had two or more years of that language in high school. It is strongly advised that students check with academic departments or academic centers to identify department-advised specific foreign language proficiency options.

A Student with a documented disability who wishes accommodation on the basis that the disability will prevent them from successfully mastering a foreign language requirement, or whose foreign language requirement was waived in high school because of a documented disability, must contact Student Accessibility Services, Smith Hall, (603) 862-2607 (Voice/TDD).

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ESCI 400	First-year Experience	1
ESCI 401 or ESCI 409	Dynamic Earth or Geology and the Environment	4

MATH 425	Calculus I	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing (or transfer or AP credit)	4
	Credits	**17**
Spring		
ESCI 402 or ESCI 405 or ESCI 420 or ESCI 501 or NR 403	Earth History or Global Environmental Change or Our Solar System or Introduction to Oceanography or Introduction to Environmental Science	4
MATH 426 or MATH 539 or BIOL 528 or CS 457	Calculus II or Introduction to Statistical Analysis or Applied Biostatistics I or Introduction to Data Science and Analytics	4
CHEM 404	General Chemistry II (strongly recommended science elective)	4
Inquiry Discovery Course [1]		4
	Credits	**16**
Second Year		
Fall		
ESCI 561	Landscape Evolution	4
ESCI ___		3-4
Foreign Language [3]		4
BIOL 41X		4
	Credits	**15-16**
Spring		
ESCI 512 or NR 501	Principles of Mineralogy or Studio Soils	4
Discovery Course [1]		4
Foreign Language [3]		4
Discovery Course [1]		4
	Credits	**16**
Third Year		
Fall		
PHYS 407	General Physics I (or 2nd major/minor or PHYS 401 strongly recommended)	4
ESCI ___ (number >512)		3-4
Open Elective [4]		4
Discovery Course [1]		4
	Credits	**15-16**
Spring		
ESCI 690	Capstone & Professional Development	1
PHYS 408 or PHYS 402 or BIOL 412	General Physics II (recommended science elective) or Introduction to Physics II or Introductory Biology: Evolution, Biodiversity and Ecology	4
Open Elective [4]		4
Open Elective [4]		4
Discovery Course [1]		4
	Credits	**17**
Fourth Year		
Fall		
ESCI 7__		4
Open Elective [4]		4
Open Elective [4]		4
Discovery Course [1]		4
	Credits	**16**
Spring		
ESCI 7__		4
Open Elective [4]		4
Open Elective [4]		4
Senior Capstone		4
	Credits	**16**
	Total Credits	**128-130**

1 One course must be taken in each of the remaining Disciplinary Groups of the University Discovery Program (Biological Sciences; Environment Technology & Society; Historical Perspectives; World Culture; Fine & Performing Arts; Social Science; Humanities).

2 Three math/science electives must be approved in consultation with departmental advisor. These are typically in the fields of mathematics, chemistry, physics, and biology. Students considering graduate school or licensure as a Professional Geologist should take MATH 426 Calculus II, CHEM 404 General Chemistry II, along with either PHYS 407 General Physics I and PHYS 408 General Physics II, or BIOL 411 Introductory Biology: Molecular and Cellular and BIOL 412 Introductory Biology: Evolution, Biodiversity and Ecology.

3 The Bachelor of Arts degree requires proficiency in a foreign language. This requirement may be fulfilled by completing the equivalent of a full-year elementary-level course in a language not previously studied, or by completing the equivalent of a semester of a course in a foreign language at the intermediate or higher level, or by earning credit through an approved Advanced Placement or College Board foreign language achievement test (minimum scores vary). The proficiency in a foreign language requirement must be satisfied by the end of the sophomore year. No credit is awarded for elementary year college coursework if the student has had two or more years of that language in high school. It is strongly advised that students check with academic departments or academic centers to identify department-advised specific foreign language proficiency options.
A Student with a documented disability who wishes accommodation on the basis that the disability will prevent them from successfully mastering a foreign language requirement, or whose foreign language requirement was waived in high school because of a documented disability, must contact Student Accessibility Services, Smith Hall, (603) 862-2607 (Voice/TDD).

4 Students should consider additional courses in Earth Sciences and other science and math courses.

Student Learning Outcomes

Program Learning Outcomes

Students graduating with a B.A. in Earth and Environmental Sciences should achieve the following learning outcomes:

- Demonstrate a broad understanding of Earth systems and their interactions, as well as their geologic and climatic history, how

and why these are changing today, and how these changes impact society.

- Recognize and understand common Earth materials, geologic structures, dynamics, processes, and cycles.
- Perform calculations and apply computational methods to process and evaluate a range of quantitative Earth and environmental science data.
- Become proficient in basic geological and Earth science laboratory and field techniques.
- Effectively communicate results of scientific inquiries orally, visually, and in writing.

Earth and Environmental Sciences Minor

https://www.unh.edu/program/minor/earth-environmental-sciences

Description

The Department of Earth Sciences offers a minor in Earth and Environmental Sciences that provides a broad foundation and essential skills to complement other majors and prepare students to pursue a wide range of careers that require an understanding of Earth processes and management of natural resources. Students in this minor are able to choose from a broad range of courses to accommodate their specific Earth and environmental science interests.

Students interested in the Earth and Environmental Sciences minor should contact matt.davis@unh.edu for more information.

Requirements

Academic policies related to Minors.

The Earth and Environmental Sciences minor typically is completed with five ESCI courses and may include research credits supervised by an Earth Sciences faculty member.

- Courses in the Earth and Environmental Sciences minor must include both introductory and more advanced ESCI courses.
- Strongly recommended introductory courses include ESCI 401 Dynamic Earth or ESCI 409 Geology and the Environment (students may not receive credit for both ESCI 401 and ESCI 409) and ESCI 402 Earth History.
- More advanced courses must include at least one at the 600 or 700 level.
- Specific courses in the program are selected in consultation with a minor advisor in the Department of Earth Sciences, with flexibility in approved courses to accommodate interests in different aspects of the geosciences.

Approved courses for the minor in Earth and Environmental Sciences

Code	Title	Credits
ESCI 401	Dynamic Earth	4
ESCI 402	Earth History	4
ESCI 405	Global Environmental Change	4
ESCI 409	Geology and the Environment	4
ESCI 410	Earth Hazards	4
ESCI 420	Our Solar System	4
ESCI 444A	Philosophy of Earth Science	4
ESCI 501	Introduction to Oceanography	4
ESCI 502	Beaches and Coasts	4
ESCI 512	Principles of Mineralogy	4
ESCI 514	Introduction to Climate	3
ESCI 530	Geological Field Methods	4
ESCI 534	Techniques in Environmental Sciences	3
ESCI 614	Introduction to Petrology	4
ESCI 630	Earth's Crust: Formation and Deformation	4
ESCI 633	Sea Level Rise and Fall	4
ESCI 642	Biogeosciences in the Earth System	3
ESCI 654	Fate and Transport in the Environment	4
ESCI 701	Quantitative Methods in Earth Sciences	4
ESCI 705	Principles of Hydrology	4
ESCI 710	Groundwater Hydrology	4
ESCI 715	Hydrologic Data Analysis	4
ESCI 720	Ocean Measurements Lab	4
ESCI 726	Igneous and Metamorphic Petrology	4
ESCI 734	Global Geophysics	4
ESCI 741	Geochemistry	4
ESCI 745	Isotope Geochemistry	4
ESCI 747	Aqueous Geochemistry	4
ESCI 749W	Ocean Biogeochemistry	3
ESCI 752	Chemical Oceanography	3
ESCI 754	Sedimentology	4
ESCI 756	Geotectonics	3
ESCI 758	Introductory Physical Oceanography	3
ESCI 759	Geological Oceanography	4
ESCI 760	Paleoceanography	3
ESCI 762	Glacial Geology	4
ESCI 764	Spectral Analysis of Geophysical Time Series Data	4
ESCI 765	Paleoclimatology	3
ESCI 770	Geodesy for Ocean Mapping	3
ESCI 771	Positioning for Ocean Mapping	4
ESCI 777	GIS for Earth & Environmental Sciences	4
ESCI 778	Remote Sensing Earth & Environmental Sciences	4
NR 403	Introduction to Environmental Science	4
NR 501	Studio Soils	4
NR 504	Freshwater Resources	4
NR 507	Introduction to our Energy System and Sustainable Energy	4
NR 658	Introduction to Geographic Information Systems	4
GEOG 473	Elements of Weather	4
CEE 520	Environmental Pollution and Protection: A Global Context	4

Earth Sciences Major (B.S.)

https://www.unh.edu/program/bachelor-science/earth-sciences

Description

The Bachelor of Science degree in the Department of Earth Sciences has two specializations: Geosciences and Ocean Sciences. The Geosciences specialization is designed for students interested in studying Earth processes recorded in geological, geophysical and geochemical observations and measurements at a range of time and spatial scales. The Ocean Sciences specialization focuses on the interconnected physics, chemistry, biology, and geology of the modern and ancient global oceans. This major is well suited for students who desire a strong concentration in the Earth sciences built upon a broad foundation in mathematics and the physical sciences and immersion in intermediate and advanced coursework to solve problems and advance our understanding of Earth processes. The Earth Sciences degree prepares students for work in the environmental, marine, and geosciences industries, energy sector and climate technologies, teaching at the secondary level, state and federal agencies, graduate studies in

the Earth sciences, oceanography, and related fields of study, and other careers in the Earth sciences and beyond.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
MATH 425	Calculus I [1]	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
CHEM 403	General Chemistry I [1,2]	4
CHEM 404	General Chemistry II	4
PHYS 407	General Physics I [1]	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II [1]	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
*Specialization**		
Select one of the following specializations:		
Geosciences Specialization		
Ocean Sciences Specialization		
Professional Development		
ESCI 400	First-year Experience	1
ESCI 690	Capstone & Professional Development	1
*Capstone Experience**		
Total Credits		**26**

1 Some of these courses may also satisfy Discovery Program requirements.
2 Or CHEM 405 Chemical Principles for Engineers if applicable

*Specialization Requirements

Code	Title	Credits
Geosciences Specialization		
Required Courses		
ESCI 401	Dynamic Earth	4
or ESCI 409	Geology and the Environment	
ESCI 402	Earth History	4
ESCI 501	Introduction to Oceanography	3-4
or ESCI 514	Introduction to Climate	
ESCI 512	Principles of Mineralogy	4
ESCI 530	Geological Field Methods	3-4
or ESCI 534	Techniques in Environmental Sciences	
ESCI 561	Landscape Evolution	4
ESCI 630	Earth's Crust: Formation and Deformation	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
Select one course from the following:		4
ESCI 633	Sea Level Rise and Fall	
ESCI 654	Fate and Transport in the Environment	
ESCI 701	Quantitative Methods in Earth Sciences	
Select a minimum of three additional 700-level approved Geosciences electives from the list below.		9-12
Select three approved science electives determined in consultation with department advisor.		9-12
The following should be considered: ESCI courses (5xx or above), courses in Mathematics, Chemistry, and Physics; courses in Computer Science, Engineering, the Biological Sciences, or Natural Resources and the Environment. Minors, Double Majors, or a Dual Major in Sustainability are encouraged.		
Select free electives to complete a total of 128 credits.		
Total Credits		**52-60**

Code	Title	Credits
Ocean Sciences Specialization		
Required Courses		
ESCI 401	Dynamic Earth	4
or ESCI 402	Earth History	
or ESCI 409	Geology and the Environment	
BIOL 411	Introductory Biology: Molecular and Cellular	4
ESCI 501	Introduction to Oceanography	4
ESCI 514	Introduction to Climate	3
ESCI 720	Ocean Measurements Lab	4
Select one course from the following:		4
ESCI 633	Sea Level Rise and Fall	
ESCI 654	Fate and Transport in the Environment	
ESCI 701	Quantitative Methods in Earth Sciences	
ESCI 764	Spectral Analysis of Geophysical Time Series Data	
Select three courses from the following:		9-12
ESCI 752	Chemical Oceanography	
ESCI 758	Introductory Physical Oceanography	
ESCI 759	Geological Oceanography	
MEFB 755	Biological Oceanography	
Select a minimum of three additional 700-level electives in Earth Sciences from the approved Ocean Sciences electives list below.		9-12
Select one additional course from BIOL, CHEM, PHYS, or MATH.		4
Select a minimum of three additional 500-level or above approved Ocean Sciences electives from the list below.		9-12
Total Credits		**54-63**

*Capstone Experience

A capstone experience is required of all undergraduate Earth sciences majors during their senior year. All capstone experiences at UNH must meet one or more of the following criteria:

1. The capstone synthesizes and applies disciplinary knowledge and skills.
2. The capstone fosters reflection on undergraduate learning and experience.
3. The capstone demonstrates emerging professional competencies.
4. The capstone applies, analyzes, and/or interprets research or data or artistic expression.
5. The capstone explores areas of interest based on the integration of prior learning.

Suggested ways of meeting the capstone requirement in the Department of Earth Sciences include approved INCO 790 Advanced Research Experience, ESCI 795 Topics/ESCI 796 Topics, ESCI 799 Senior Thesis, URA/SURF/IROP projects, internships, environmental/geologic field camps, REU programs, or Earth Sciences education and outreach activities designed according to the above criteria. Capstone experiences must be equivalent to a minimum of 2 academic credits. Students should work closely with their faculty advisors to define the most appropriate capstone experience for their Earth Sciences degree program, although the capstone mentor can be someone other than their primary faculty advisor. All capstone experiences must be approved and certified by the faculty advisor and the capstone mentor. Presentation of projects or

experiences developed for the capstone is encouraged at the annual UNH Undergraduate Research Conference or other appropriate venue.

Approved Electives

Code	Title	Credits
Approved Geosciences Electives		
ESCI 701	Quantitative Methods in Earth Sciences	4
ESCI 705	Principles of Hydrology	4
ESCI 710	Groundwater Hydrology	4
ESCI 715	Hydrologic Data Analysis	4.0
ESCI 720	Ocean Measurements Lab	4
ESCI 726	Igneous and Metamorphic Petrology	4
ESCI 734	Global Geophysics	4
ESCI 741	Geochemistry	4
ESCI 745	Isotope Geochemistry	4
ESCI 747	Aqueous Geochemistry	4
ESCI 749W	Ocean Biogeochemistry	3
ESCI 752	Chemical Oceanography	3
ESCI 754	Sedimentology	4
ESCI 756	Geotectonics	3
ESCI 758	Introductory Physical Oceanography	3
ESCI 759	Geological Oceanography	4
ESCI 760	Paleoceanography	3
ESCI 762	Glacial Geology	4
ESCI 764	Spectral Analysis of Geophysical Time Series Data	4
ESCI 765	Paleoclimatology	3
ESCI 770	Geodesy for Ocean Mapping	3
ESCI 771	Positioning for Ocean Mapping	4
ESCI 777	GIS for Earth & Environmental Sciences	4
ESCI 778	Remote Sensing Earth & Environmental Sciences	4

Code	Title	Credits
Approved Ocean Sciences Electives		
ESCI 502	Beaches and Coasts	4
ESCI 633	Sea Level Rise and Fall	4
ESCI 642	Biogeosciences in the Earth System	3
ESCI 654	Fate and Transport in the Environment	4
ESCI 701	Quantitative Methods in Earth Sciences	4
ESCI 734	Global Geophysics	4
ESCI 747	Aqueous Geochemistry	4
ESCI 749W	Ocean Biogeochemistry	3
ESCI 754	Sedimentology	4
ESCI 756	Geotectonics	3
ESCI 760	Paleoceanography	3
ESCI 764	Spectral Analysis of Geophysical Time Series Data	4
ESCI 765	Paleoclimatology	3
ESCI 770	Geodesy for Ocean Mapping	3
ESCI 771	Positioning for Ocean Mapping	4
ESCI 777	GIS for Earth & Environmental Sciences	4
ESCI 778	Remote Sensing Earth & Environmental Sciences	4
CEE 722	Introduction to Marine Pollution and Control	4
MARI 705	Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy	3
MARI 533	Basic SCUBA	3
MARI 730	Research Diving Technologies	4
MARI 735	Advanced SCUBA	4
MEFB 503	Introduction to Marine Biology	3
MEFB 628	Marine Invertebrate Evolution and Ecology	4
MEFB 725	Marine Ecology	3
MEFB 772	Fisheries Biology: Conservation and Management	4
OE 490	Introduction to Ocean Engineering	4
OE 610	Ocean Instrumentation Lab	4
OE 677	Seamanship and Marine Weather for Ocean Engineers and Scientists	2
OE 720	Design of Recirculating Aquaculture Systems	3
OE 753	Ocean Hydrodynamics	3
OE 754	Ocean Waves and Tides	4
OE 757	Coastal Engineering and Processes	3
OE 758	Design of Ocean Structures	3
OE 765	Underwater Acoustics	3
ZOOL 610	Principles of Aquaculture	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

Geosciences Specialization

First Year		
Fall		**Credits**
ESCI 400	First-year Experience	1
ESCI 401	Dynamic Earth	4
MATH 425	Calculus I	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing (or pass placement test)	4
	Credits	**17**
Spring		
ESCI 402	Earth History	4
MATH 426	Calculus II	4
CHEM 404	General Chemistry II	4
Inquiry Discovery Course [1]		4
	Credits	**16**
Second Year		
Fall		
ESCI 530 or ESCI 534	Geological Field Methods or Techniques in Environmental Sciences	3-4
ESCI 561	Landscape Evolution	4
PHYS 407	General Physics I	4
Discovery Course [1]		4
	Credits	**15-16**
Spring		
ESCI 501 or ESCI 514	Introduction to Oceanography or Introduction to Climate	3-4
ESCI 512	Principles of Mineralogy	4
PHYS 408	General Physics II	4
Discovery Course [1]		4
	Credits	**15-16**
Third Year		
Fall		
ESCI 633	Sea Level Rise and Fall (or Free Elective)	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
Science Elective [2]		4
Discovery Course [1]		4
	Credits	**16**
Spring		
ESCI 630	Earth's Crust: Formation and Deformation	4

ESCI 654 or ESCI 701	Fate and Transport in the Environment (or Free Elective) or Quantitative Methods in Earth Sciences	4
ESCI 690	Capstone & Professional Development	1
ESCI 7___		4
Discovery Course [1]		4
	Credits	**17**
Fourth Year		
Fall		
ESCI 7___		4
ESCI 7___		4
Science Elective [2]		4
Discovery Course [1]		4
	Credits	**16**
Spring		
ESCI 7___		4
Science Elective [2]		4
Discovery Course [1]		4
Senior Capstone		4
	Credits	**16**
	Total Credits	**128-130**

[1] One course must be taken in each of the remaining Disciplinary Groups of the University Discovery Program (Biological Sciences; Environment Technology & Society; Historical Perspectives; World Culture; Fine & Performing Arts; Social Science; Humanities).

[2] Three science electives must be approved in consultation with departmental advisor.

Ocean Sciences Specialization

First Year		
Fall		**Credits**
ESCI 400	First-year Experience	1
ESCI 401 or ESCI 402 or ESCI 409	Dynamic Earth or Earth History or Geology and the Environment	4
MATH 425	Calculus I	4
CHEM 403	General Chemistry I	4
ESCI 501	Introduction to Oceanography	4
	Credits	**17**
Spring		
ENGL 401	First-Year Writing	4
MATH 426	Calculus II	4
CHEM 404	General Chemistry II	4
Inquiry Discovery Course [1]		4
	Credits	**16**
Second Year		
Fall		
ESCI 514	Introduction to Climate	3
BIOL 411 or BIOL 412	Introductory Biology: Molecular and Cellular or Introductory Biology: Evolution, Biodiversity and Ecology	4
PHYS 407	General Physics I	4
Discovery Course [1]		4
	Credits	**15**
Spring		
ESCI 752 or MEFB 755	Chemical Oceanography or Biological Oceanography	3-4
Ocean Science Elective [2]		4
PHYS 408	General Physics II	4
Discovery Course [1]		4
	Credits	**15-16**
Third Year		
Fall		
ESCI 758 or ESCI 759	Introductory Physical Oceanography or Geological Oceanography	3-4
ESCI 720	Ocean Measurements Lab	4
Core Science Elective [2]		4
Discovery Course [1]		4
	Credits	**15-16**
Spring		
ESCI Quantitive Analysis		4
ESCI 752 or MEFB 755	Chemical Oceanography or Biological Oceanography	3-4
ESCI 690	Capstone & Professional Development	1
Science Elective [2]		4
Discovery Course [1]		4
	Credits	**16-17**
Fourth Year		
Fall		
Ocean Science Elective [2]		4
Free Elective		4
Science Elective [2]		4
Discovery Course [1]		4
ESCI 759 or ESCI 758	Geological Oceanography or Introductory Physical Oceanography	4
	Credits	**20**
Spring		
Ocean Science Elective [2]		4
Science Elective [2]		4
Discovery Course [1]		4
Senior Capstone		4
	Credits	**16**
	Total Credits	**130-133**

[1] One course must be taken in each of the remaining Disciplinary Groups of the University Discovery Program (Biological Sciences; Environment Technology & Society; Historical Perspectives; World Culture; Fine & Performing Arts; Social Science; Humanities).

[2] Three science electives must completed from approved list.

Student Learning Outcomes

Program Learning Outcomes

Students graduating with a B.S. in Earth Sciences should achieve the following learning outcomes:

- Demonstrate a broad understanding of Earth systems and their interactions, as well as their geologic and climate history, how and why these are changing today, and how these changes impact society.
- Recognize and understand common Earth materials, geologic structures, dynamics, processes, and cycles
- Perform calculations and apply computational methods to process and evaluate a range of quantitative Earth sciences data.
- Become proficient in basic geological and Earth science laboratory and field techniques.
- Summarize, analyze, evaluate, and explain/present student-generated scientific data and the primary Earth sciences literature.
- Effectively communicate results of scientific inquiries orally, visually, and in writing.

Environmental Sciences Major: Earth Systems Option (B.S.)

https://www.unh.edu/program/bachelor-science/environmental-sciences-earth-systems

Description

The College of Engineering and Physical Sciences (CEPS) and the College of Life Science and Agriculture (COLSA) jointly offer a Bachelor of Science degree in environmental sciences. Environmental sciences, an interdisciplinary field, focuses on the interaction of biological, chemical, and physical processes that shape our natural environment. Students graduating with a degree in environmental sciences will have an understanding of these interacting processes, the ability to communicate effectively with both scientific and lay audiences, competency in field methods appropriate for entry-level environmental science positions, competency in the use and application of Geographic Information Systems (GIS), a basic understanding of environmental policy, and the ability to contribute to multidisciplinary teams. The University of New Hampshire is a recognized leader in environmental sciences research, and the environmental sciences program capitalizes on faculty expertise in this area. The full-time faculty members comprising this program have major teaching and research emphases in the areas of biogeochemical cycling, environmental chemistry, ecosystem science, geospatial science, global change, hydrology, plant ecology, soil science, and water resource management.

Employment opportunities include environmental consulting firms, educational facilities (e.g., science centers), environmental monitoring laboratories (e.g., water treatment plants; the Environmental Protection Agency), government agencies (e.g., the U.S. Geological Survey, Bureau of Land Management, Natural Resource Conservation Service), university and government research laboratories, and nongovernment environmental organizations. The environmental sciences program also constitutes an excellent preparation for graduate programs in several areas relating to the environment. Students should consult with their adviser early if their goals include further study.

The Program has 3 options, and specific course requirements for the major vary by option. The Earth Systems option is managed by the Department of Earth Sciences in CEPS, and the Ecosystems and Soils and Watersheds options are both managed by the Department of Natural Resources and the Environment in COLSA. The Earth Systems option provides students with a solid grounding in quantitative reasoning, with an emphasis on geochemical, hydrologic, and geospatial systems.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In addition to the Discovery Program and University writing requirements, all students complete introductory courses, and foundation courses that include introductions to biology, physics, chemistry, geology, calculus, and statistics. Students must complete additional courses for the Earth Systems option, including at least four courses at the 700-level.

Code	Title	Credits
Required Courses		
Foundation		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	4-8
or CHEM 405	Chemical Principles for Engineers	
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
MATH 644	Statistics for Engineers and Scientists	4
or BIOL 528	Applied Biostatistics I	
BIOL 411	Introductory Biology: Molecular and Cellular	4
or BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	
Intro		
ESCI 400	First-year Experience	1
or NR 400	Professional Perspectives in Natural Resources	
NR 403	Introduction to Environmental Science	4
Select one introductory level elective from the following:		4
ESCI 405	Global Environmental Change	
ESCI 420	Our Solar System	
ESCI 501	Introduction to Oceanography	
ESCI 514	Introduction to Climate	
NR 504	Freshwater Resources	
CEE 520	Environmental Pollution and Protection: A Global Context	
GEOG 473	Elements of Weather	
Earth Systems		
ESCI 401	Dynamic Earth	4
or ESCI 402	Earth History	
or ESCI 409	Geology and the Environment	
ESCI 561	Landscape Evolution	4
ESCI 512	Principles of Mineralogy	4

or NR 501	Studio Soils	
ESCI 642	Biogeosciences in the Earth System	3-4
or ESCI 654	Fate and Transport in the Environment	
NR 602	Natural Resources and Environmental Policy	4
or NR 507	Introduction to our Energy System and Sustainable Energy	
Hydrology Elective		
ESCI 705	Principles of Hydrology	4
or ESCI 710	Groundwater Hydrology	
Geochemistry Elective		
ESCI 741	Geochemistry	4
or ESCI 745	Isotope Geochemistry	
or ESCI 747	Aqueous Geochemistry	
Methods		
ESCI 534	Techniques in Environmental Sciences	3
NR 658	Introduction to Geographic Information Systems	4
or ESCI 777	GIS for Earth & Environmental Sciences	
Select one quantitative methods elective from the following:		4
ESCI 633	Sea Level Rise and Fall	
ESCI 654	Fate and Transport in the Environment	
ESCI 701	Quantitative Methods in Earth Sciences	
ESCI 734	Global Geophysics	
ESCI 764	Spectral Analysis of Geophysical Time Series Data	
CS 410P	Introduction to Scientific Programming/Python	
CS 457	Introduction to Data Science and Analytics	
MATH 527	Differential Equations with Linear Algebra	
MATH 528	Multidimensional Calculus	
MATH 645	Linear Algebra for Applications	
MATH 739	Applied Regression Analysis	
MATH 740	Design of Experiments I	
Math/Science Electives		
Select two approved science electives determined in consultation with departmental advisor.		8
The following should be considered: additional courses in Earth Sciences, Mathematics, Chemistry, and Physics; Computer Science, Engineering, the Biological Sciences, or Natural Resources and the Environment.		
Professional Development		
ESCI 690	Capstone & Professional Development	1
*Capstone Experience**		
Total Credits		**84-89**

For further information about the Earth systems option, students may contact earth.sciences@unh.edu. (earth.sciences@unh.edu)

Some students enroll in the EcoQuest program (a study abroad opportunity in New Zealand), which satisfies the policy requirement, and capstone requirement if taken senior year.

*Capstone Experience

A capstone experience is required of all undergraduate Earth sciences majors during their senior year. All capstone experiences at UNH must meet one or more of the following criteria:

1. The capstone synthesizes and applies disciplinary knowledge and skills.
2. The capstone fosters reflection on undergraduate learning and experience.
3. The capstone demonstrates emerging professional competencies.
4. The capstone applies, analyzes, and/or interprets research or data or artistic expression.
5. The capstone explores areas of interest based on the integration of prior learning.

Suggested ways of meeting the capstone requirement in the Department of Earth Sciences include approved INCO 790 Advanced Research Experience, ESCI 795 Topics, ESCI 796 Topics, ESCI 799 Senior Thesis, URA/SURF/IROP projects, internships, environmental/geologic field camps, REU programs, or Earth Sciences education and outreach activities designed according to the above criteria. Capstone experiences must be equivalent to a minimum of 2 academic credits. Students should work closely with their faculty advisors to define the most appropriate capstone experience for their Earth Sciences degree program, although the capstone mentor can be someone other than their primary faculty advisor. All capstone experiences must be approved and certified by the faculty advisor and the capstone mentor. Presentation of projects or experiences developed for the capstone is encouraged at the annual UNH Undergraduate Research Conference or other appropriate venue.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ESCI 400 or NR 400	First-year Experience or Professional Perspectives in Natural Resources	1
NR 403	Introduction to Environmental Science	4
MATH 425	Calculus I	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing (or pass placement test)	4
	Credits	**17**
Spring		
ESCI 409 or ESCI 402	Geology and the Environment or Earth History	4
MATH 426	Calculus II	4
CHEM 404	General Chemistry II	4
Inquiry Discovery Course [1]		4
	Credits	**16**
Second Year		
Fall		
ESCI 534	Techniques in Environmental Sciences	3
PHYS 407	General Physics I	4
Intro-level Environmental Science elective		4
Discovery Course [1]		4
	Credits	**15**
Spring		
BIOL 411 or BIOL 412	Introductory Biology: Molecular and Cellular or Introductory Biology: Evolution, Biodiversity and Ecology	4
ESCI 512	Principles of Mineralogy	4
PHYS 408	General Physics II	4
Discovery Course [1]		4
	Credits	**16**
Third Year		
Fall		
ESCI 777	GIS for Earth & Environmental Sciences	4

NR 602	Natural Resources and Environmental Policy	4
ESCI 561	Landscape Evolution	4
Discovery Course [1]		4
	Credits	**16**
Spring		
BIOL 528 or MATH 644	Applied Biostatistics I or Statistics for Engineers and Scientists	4
ESCI 654 or ESCI 642	Fate and Transport in the Environment or Biogeosciences in the Earth System	4
ESCI 690	Capstone & Professional Development	1
Science Elective [2]		4
Discovery Course [1]		4
	Credits	**17**
Fourth Year		
Fall		
ESCI 705 or ESCI 741	Principles of Hydrology or Geochemistry	4
Quantative Methods Elective		4
Free Elective [2]		4
Discovery Course [1]		4
	Credits	**16**
Spring		
ESCI 710 or ESCI 745	Groundwater Hydrology or Isotope Geochemistry	4
Science Elective [2]		4
Free Elective		4
Senior Capstone		4
	Credits	**16**
	Total Credits	**129**

1 One course must be taken in each of the remaining Disciplinary Groups of the University Discovery Program (Environment Technology & Society; Historical Perspectives; World Culture; Fine & Performing Arts; Social Science; Humanities).

2 Three technical electives must be approved in consultation with departmental advisor.
All students must take four writing intensive courses, including ENGL 401 First-Year Writing, a course in the major, and a course at the 600/700 level.

Student Learning Outcomes

Program Learning Outcomes

Students graduating with a B.S. in Environmental Sciences: Earth Systems Option should achieve the following learning outcomes:

- Demonstrate a broad understanding of Earth and environmental systems, with an emphasis on interactions among physical, chemical, and biological processes that shape our natural environment and impact society.
- Recognize and understand common Earth and environmental materials, dynamics, processes, and cycles.
- Perform calculations and apply computational methods to process and evaluate a range of quantitative Earth and environmental science, biogeochemical, and hydrologic data.
- Become proficient in basic Earth and environmental science laboratory, field, and geospatial techniques.
- Summarize, analyze, evaluate, and explain/present student-generated scientific data and the primary Earth and environmental sciences literature.
- Effectively communicate results of scientific inquiries orally, visually, and in writing.

Ocean Sciences Minor

https://www.unh.edu/program/minor/ocean-sciences

Description

The minor is available to students interested in obtaining a broad background in ocean sciences. All courses in the program are selected in consultation with the minor advisor.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
ESCI 501	Introduction to Oceanography	4
Select two courses from the following:		6-8
ESCI 752	Chemical Oceanography	
ESCI 758	Introductory Physical Oceanography	
ESCI 759	Geological Oceanography	
MEFB 755	Biological Oceanography	
Select two courses from the following: [1]		6-8
ESCI 502	Beaches and Coasts	
ESCI 514	Introduction to Climate	
ESCI 701	Quantitative Methods in Earth Sciences	
ESCI 720	Ocean Measurements Lab	
ESCI 747	Aqueous Geochemistry	
ESCI 749W	Ocean Biogeochemistry	
ESCI 754	Sedimentology	
ESCI 756	Geotectonics	
ESCI 765	Paleoclimatology	
ESCI/OE 771	Positioning for Ocean Mapping	
CEE 722	Introduction to Marine Pollution and Control	
MEFB 401	Marine Estuarine and Freshwater Biology: Freshmen Seminar	
MEFB 403	Investigative Marine Biology Laboratory	
MEFB 503	Introduction to Marine Biology	
MEFB 508	Marine Ecosystem Research and Management	
MEFB 530	Evolution and Marine Diversity	
MEFB 535	Marine Mammal Biology	
MEFB 625	Introduction to Marine Botany	
MEFB 628	Marine Invertebrate Evolution and Ecology	
MEFB 674	Ecology and Marine Environment	
MEFB 702	Sustainable Marine Fisheries	
MEFB 725	Marine Ecology	
MEFB 754	Anatomy and Function of Marine Vertebrates	
MEFB 772	Fisheries Biology: Conservation and Management	
MEFB 773	Physiology of Fishes	
OE 490	Introduction to Ocean Engineering	
OE 610	Ocean Instrumentation Lab	
OE 753	Ocean Hydrodynamics	
OE 754	Ocean Waves and Tides	
OE 757	Coastal Engineering and Processes	

TECH 797	Undergraduate Ocean Research Project
ZOOL 610	Principles of Aquaculture
ZOOL 710	Sharks and Bony Fishes

[1] Or a suitable substitute approved by the minor advisor (at least one of these courses should be in the biological sciences).

Electrical and Computer Engineering

Electrical engineers design, develop, and produce the electrical and electronic systems upon which modern society has come to depend: basic infrastructure, such as the electric power grid and fiber optic communication lines; public conveniences, such as mag lev transporters and LED signs; consumer products, such as smart appliances; personal communication devices, such as smart phones; military systems, such as rail guns and laser weapons; instruments that can image the ocean floor or analyze the Earth's atmosphere from satellites; and medical diagnostic machines like CAT and MRI scanners. Almost every facet of modern life is touched by the work of electrical engineers. Students electing this major gain knowledge of advanced electronic circuit and system design through the use of computer-aided design tools, hardware circuit prototyping, and hands-on laboratory testing.

Computers have become embedded in virtually every engineering system, including everyday items ranging from smart watches to electric vehicles. Computer engineering, is a rapidly growing field that emphasizes the design, interfacing, hardware/software tradeoffs, real-time applications of embedded computers, and IOT devices. Students who elect this major will gain a knowledge of both hardware and software concepts, and will learn to design, build, and test systems containing digital computers.

Embedded in both the electrical engineering and computer engineering programs is the biomedical engineering option. The option provides core knowledge expected of a computer and/or electrical engineer to provide engineering services in the biomedical field. Electrical and/or computer engineers with this option combine engineering principles with medical and biological sciences to design and create equipment, devices, computer systems, and software applications used in the healthcare field.

At UNH, the cornerstone of the electrical and computer engineering programs are the involvement of students in the solution of real-world problems.

ECE Department Mission

The mission of the department is to foster and advance knowledge in electrical and computer engineering.

The mission involves:

- teaching courses in electrical and computer engineering and related fields at the bachelor's, master's, and doctoral levels;
- advancing knowledge through research and scholarship;
- serving the state and nation by making the department's intellectual resources available to industry and government agencies. The undergraduate EE and CE programs shall provide a firm foundation in electrical and computer engineering theory and practice, with a mix of laboratory and design experiences. The programs also shall foster teamwork and project management skills.

The department recognizes the need to conduct periodic reviews and adjustments to meet the current and projected needs of the state and nation according to its mission objectives.

Program Educational Objectives

The Department of Electrical and Computer Engineering has adopted a set of program educational objectives that consists of statements describing the expected accomplishments of graduates during the first several years following graduation from either programs:

Electrical Engineering:

Depth: To be effective in applying electrical engineering principles in engineering practice or for advanced study.

Breadth: To have a productive career in the many diverse fields of electrical engineering such as analog engineering, biomedical engineering, communications, and electromagnetics and waves, or in the pursuit of graduate education in disciplines such as electrical engineering, medicine, law or business.

Professionalism: To function effectively in the complex modern work environment with the ability to assume professional leadership roles.

Electrical Engineering Biomedical Engineering Option:

Depth: To be effective in applying electrical engineering principles in engineering practice or for advanced study.

Breadth: To have a productive career in the many diverse fields of electrical engineering such as analog engineering, biomedical engineering, communications, and electromagnetics and waves, or in the pursuit of graduate education in disciplines such as electrical engineering, medicine, law or business.

Professionalism: To function effectively in the complex modern work environment with the ability to assume professional leadership roles.

Computer Engineering:

Depth: To be effective in applying computer engineering principles in engineering practice or for advanced study.

Breadth: To have a productive career in the many diverse fields of computer engineering such as digital engineering, biomedical engineering, security, communications, and embedded systems, or in the pursuit of graduate education in disciplines such as computer engineering, medicine, law or business.

Professionalism: To function effectively in the complex modern work environment with the ability to assume professional leadership roles.

Computer Engineering Biomedical Engineering Option:

Depth: To be effective in applying computer engineering principles in engineering practice or for advanced study.

Breadth: To have a productive career in the many diverse fields of computer engineering such as digital engineering, biomedical engineering, security, communications, and embedded systems, or in the pursuit of graduate education in disciplines such as computer engineering, medicine, law or business.

Professionalism: To function effectively in the complex modern work environment with the ability to assume professional leadership roles.

Student Outcomes

The Department of Electrical and Computer Engineering has adopted a set of student outcomes that consists of statements describing what students are expected to know and be able to do by the time of graduation, the achievement of which indicates that the student is equipped to achieve the program objectives. The current student outcomes are:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

https://ceps.unh.edu/electrical-computer-engineering

Programs

- Computer Engineering Major (B.S.) (p. 130)
- Computer Engineering Major: Biomedical Engineering Option (B.S.) (p. 132)
- Electrical Engineering Major (B.S.) (p. 134)
- Electrical Engineering Major: Biomedical Engineering Option (B.S.) (p. 136)
- Electrical and Computer Engineering Minor (p. 138)

Faculty

Electrical and Computer Engineering Faculty

Computer Engineering Major (B.S.)

https://www.unh.edu/program/bachelor-science/computer-engineering

Description

This program is tailored to students who want to understand and participate in the engineering discipline that merges electronics systems with software. Students learn the fundamental concepts of electrical circuits and how those circuits can be controlled by software, gaining skills and technological expertise needed to succeed in graduate studies or a variety of career fields.

In addition to the university's mandatory Discovery Program requirements, degree candidates must complete our core program (freshman through junior years). In the senior year, students select professional technical electives in the areas of their interest. They also carry out a student-designed project to acquire both breadth and depth of study and to integrate knowledge across course boundaries.

The Computer Engineering (B Sci in Computer Engineering) program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 129 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In addition to Discovery Program requirements, the department has a number of grade-point average and course requirements:

1. Any computer engineering major whose cumulative grade-point average in ECE and CS courses is less than 2.0 during any three semesters will not be allowed to continue as a computer engineering major.
2. Computer engineering majors must achieve a 2.0 grade-point average in all ECE and CS courses as a requirement for graduation.

To make an exception to any of these departmental requirements based on extenuating circumstances, students must petition the department's undergraduate committee. Mindful of these rules, students, with their advisor's assistance, should plan their programs based on the distribution of courses found in the Degree Plan tab.

Code	Title	Credits
Required Courses		
CS 410C	Introduction to Scientific Programming/C	4
CS 419	Computer Science for Engineers and Scientists	4
ECE 401	Perspectives in Electrical and Computer Engineering	4
ECE 541	Electric Circuits	4
ECE 543	Introduction to Digital Systems	4
ECE 548	Electronic Design I	4
ECE 562	Computer Organization	4
ECE 583	Designing with Programmable Logic	6
ECE 602	Engineering Analysis	3
ECE 603	Electromagnetic Fields and Waves I	3
ECE 633	Signals and Systems I	3
ECE 634	Signals and Systems II	3
ECE 647	Random Processes and Signals in Engineering	3
ECE 649	Embedded Microcomputer Based Design	6
ECON 402	Principles of Economics (Micro)	4
or NR 411	Environmental and Resource Economics Perspectives	

MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 645	Linear Algebra for Applications	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
Capstone [2]		
ECE 791	Senior Project I	3
ECE 792	Senior Project II	3
Professional Electives		
Select four professional elective courses [1]		16
Other Courses		
Discovery requirements not already covered by required courses [2]		24
Total Credits		**129**

[1] Four professional electives must be selected as follows:
- Select two ECE 700-level courses, one course could be ECE 652 Electronic Design II.
- Students are allowed to take only one as ECE 795 Electrical and Computer Engineering Projects or ECE 796 Special Topics.
- Remaining professional electives can include: CS 619 Introduction to Object-Oriented Design and Development CS 620 Operating System Fundamentals, CS 659 Introduction to the Theory of Computation, or any CS 700-level course.

[2] Fulfilling the CE Program curriculum taking ECE 401 Perspectives in Electrical and Computer Engineering, ECE 791 Senior Project I, and ECE 792 Senior Project II curriculum will automatically meet Discovery Category, "Environment, Technology and Society."

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ECE 401	Perspectives in Electrical and Computer Engineering	4
CS 410C	Introduction to Scientific Programming/C	4
MATH 425	Calculus I	4
ECON 402 or NR 411	Principles of Economics (Micro) [1] or Environmental and Resource Economics Perspectives	4
	Credits	**16**
Spring		
PHYS 407	General Physics I	4
CS 419	Computer Science for Engineers and Scientists	4
MATH 426	Calculus II	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Second Year		
Fall		
ECE 541	Electric Circuits	4
ECE 543	Introduction to Digital Systems	4
MATH 527	Differential Equations with Linear Algebra	4
PHYS 408	General Physics II	4
	Credits	**16**
Spring		
ECE 548	Electronic Design I	4
ECE 562	Computer Organization	4
MATH 645	Linear Algebra for Applications	4
Discovery Program Category		4
	Credits	**16**
Third Year		
Fall		
ECE 602	Engineering Analysis	3
ECE 633	Signals and Systems I	3
ECE 583	Designing with Programmable Logic	6
Discovery Program Category		4
	Credits	**16**
Spring		
ECE 603	Electromagnetic Fields and Waves I	3
ECE 647	Random Processes and Signals in Engineering	3
ECE 634	Signals and Systems II	3
ECE 649	Embedded Microcomputer Based Design	6
Discovery Program Category		4
	Credits	**19**
Fourth Year		
Fall		
ECE 791	Senior Project I (Capstone Course)	3
Two Professional Electives [2]		8
Discovery Program Category		4
	Credits	**15**
Spring		
ECE 792	Senior Project II (Capstone Course)	3
Two Professional Electives [2]		8
Discovery Program Category		4
	Credits	**15**
	Total Credits	**129**

[1] Students are required to take either ECON 402 Principles of Economics (Micro) or NR 411 Environmental and Resource Economics Perspectives to fulfill the Social Science Category of the Discovery Program.

[2] Four professional electives must be selected as follows:
- Choose two ECE 7XX courses, one course could be ECE 652 Electronic Design II.
- Students are allowed to take only one as ECE 795 Electrical and Computer Engineering Projects or ECE 796 Special Topics.
- Remaining professional electives can include: CS 619 Introduction to Object-Oriented Design and Development , CS 620 Operating

System Fundamentals, CS 659 Introduction to the Theory of Computation, or any CS 7XX course.

Fulfilling the CE program curriculum taking ECE 401 Perspectives in Electrical and Computer Engineering, ECE 791 Senior Project I, and ECE 792 Senior Project II will automatically meet Discovery Category, "Environment, Technology and Society."

Student Learning Outcomes

The Department of Electrical and Computer Engineering has adopted a set of student outcomes that consists of statements describing what students are expected to know and be able to do by the time of graduation, the achievement of which indicates that the student is equipped to achieve the program objectives.

The current student outcomes are:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Computer Engineering Major: Biomedical Engineering Option (B.S.)

https://www.unh.edu/program/bachelor-science/computer-engineering-biomedical-engineering

Description

The Biomedical Engineering (BME) Option is intended to provide the core of knowledge expected of a computer and/or electrical engineer to provide engineering services in the biomedical field. Electrical and/or computer engineers with this option in biomedical engineering combine engineering principles with medical and biological sciences to design and create equipment, devices, computer systems, and software used in healthcare. The BME option is embedded in both the Electrical Engineering (EE) program and the Computer Engineering (CE) program.

The Computer Engineering (B Sci in Computer Engineering) program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 129 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In addition to Discovery Program requirements, the department has a number of grade-point average and course requirements:

1. Any computer engineering major whose cumulative grade-point average in ECE and CS courses is less than 2.0 during any three semesters will not be allowed to continue as a computer engineering major.
2. Computer engineering majors must achieve a 2.0 grade-point average in all ECE and CS courses as a requirement for graduation.

To make an exception to any of these departmental requirements based on extenuating circumstances, students must petition the department's undergraduate committee. Mindful of these rules, students, with their advisor's assistance, should plan their programs based on the distribution of courses found in the Degree Plan tab.

Code	Title	Credits
Required Courses		
BMS 508	Human Anatomy and Physiology II	4
CS 410C	Introduction to Scientific Programming/C	4
CS 419	Computer Science for Engineers and Scientists	4
ECE 401	Perspectives in Electrical and Computer Engineering	4
ECE 541	Electric Circuits	4
ECE 543	Introduction to Digital Systems	4
ECE 548	Electronic Design I	4
ECE 562	Computer Organization	4
ECE 583	Designing with Programmable Logic	6
ECE 602	Engineering Analysis	3
ECE 603	Electromagnetic Fields and Waves I	3
ECE 633	Signals and Systems I	3
ECE 634	Signals and Systems II	3
ECE 647	Random Processes and Signals in Engineering	3
ECE 649	Embedded Microcomputer Based Design	6
ECON 402	Principles of Economics (Micro)	4
or NR 411	Environmental and Resource Economics Perspectives	
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 645	Linear Algebra for Applications	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	

PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
Capstone [2]		
ECE 791	Senior Project I	3
ECE 792	Senior Project II	3
Professional Electives		
Select one professional elective course [1]		4
Biomedical Engineering Option Required Courses		
ECE 717	Introduction to Digital Image Processing	4
ECE 784	Biomedical Instrumentation	4
CHBE 762	Biomedical Engineering	4
or CHBE 766	Biomaterials	
Other Courses		
Discovery requirements not already covered by required courses [2]		20
Total Credits		**129**

[1] Professional elective must be selected as follows:
- Select any one ECE 700-level course.
- Students are allowed to take only one as ECE 795 Electrical and Computer Engineering Projects or ECE 796 Special Topics

[2] Fulfilling the CE Program curriculum taking ECE 401 Perspectives in Electrical and Computer Engineering, ECE 791 Senior Project I, and ECE 792 Senior Project II curriculum will automatically meet Discovery Category, "Environment, Technology and Society."

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ECE 401	Perspectives in Electrical and Computer Engineering	4
MATH 425	Calculus I	4
CS 410C	Introduction to Scientific Programming/C	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Spring		
PHYS 407	General Physics I	4
MATH 426	Calculus II	4
CS 419	Computer Science for Engineers and Scientists	4
BMS 508	Human Anatomy and Physiology II	4
	Credits	**16**
Second Year		
Fall		
ECE 541	Electric Circuits	4
ECE 543	Introduction to Digital Systems	4
MATH 527	Differential Equations with Linear Algebra	4
PHYS 408	General Physics II	4
	Credits	**16**
Spring		
ECE 548	Electronic Design I	4
ECE 562	Computer Organization	4
MATH 645	Linear Algebra for Applications	4
ECON 402 or NR 411	Principles of Economics (Micro) [1] or Environmental and Resource Economics Perspectives	4
	Credits	**16**
Third Year		
Fall		
ECE 583	Designing with Programmable Logic	6
ECE 602	Engineering Analysis	3
ECE 633	Signals and Systems I	3
Discovery Program Category		4
	Credits	**16**
Spring		
ECE 603	Electromagnetic Fields and Waves I	3
ECE 634	Signals and Systems II	3
ECE 647	Random Processes and Signals in Engineering	3
ECE 649	Embedded Microcomputer Based Design	6
Discovery Program Category		4
	Credits	**19**
Fourth Year		
Fall		
ECE 791	Senior Project I (Capstone Course)	3
CHBE 762 or CHBE 766	Biomedical Engineering or Biomaterials	4
One Professional Elective Course [2]		4
Discovery Program Category		4
	Credits	**15**
Spring		
ECE 717	Introduction to Digital Image Processing	4
ECE 784	Biomedical Instrumentation	4
ECE 792	Senior Project II (Capstone Course)	3
Discovery Program Category		4
	Credits	**15**
	Total Credits	**129**

[1] Students are required to take either ECON 402 Principles of Economics (Micro) or NR 411 Environmental and Resource Economics Perspectives to fulfill the Social Science Category of the Discovery Program.

[2] One professional elective must be selected as follows:
- Select any one ECE 700-level course.

Fulfilling the EE Program curriculum taking ECE 401 Perspectives in Electrical and Computer Engineering, ECE 791 Senior Project I, and ECE 792 Senior Project II curriculum will automatically meet Discovery Category, "Environment, Technology and Society."

Student Learning Outcomes

The Department of Electrical and Computer Engineering has adopted a set of student outcomes that consists of statements describing what students are expected to know and be able to do by the time of graduation, the achievement of which indicates that the student is equipped to achieve the program objectives.

The current student outcomes are:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Electrical Engineering Major (B.S.)

https://www.unh.edu/program/bachelor-science/electrical-engineering

Description

This program is tailored to students who want to understand and participate in the ever-growing world of electronics technology. Students learn the fundamental concepts related to the design, development, testing and modeling of a wide range of electrical systems. By gaining skills and technological expertise, students leave this program prepared to succeed in graduate studies or a variety of career fields.

In addition to the university's mandatory Discovery Program requirements, degree candidates must complete our core program (freshman through junior years). In the senior year, students select professional technical electives in the areas of their interest. They also carry out a student-designed project to acquire both breadth and depth of study and to integrate knowledge across course boundaries.

For a detailed semester by semester list of requirements for the four years of study, please refer to the Degree Plan tab.

The Electrical Engineering (B Sci in Electrical Engineering) program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 129 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In addition to Discovery Program requirements, the department has a number of grade-point average and course requirements.

1. Any electrical engineering major whose cumulative grade-point average in ECE courses is less than 2.0 during any three semesters will not be allowed to continue as an electrical engineering major.
2. Electrical engineering majors must achieve a 2.0 grade-point average in all ECE and CS courses as a requirement for graduation.

To make an exception to any of these departmental requirements based on extenuating circumstances, students must petition the department's undergraduate committee. Mindful of these rules, students, with their advisor's assistance, should plan their programs based on the distribution of courses found in the Degree Plan tab.

Code	Title	Credits
Required Courses		
CS 410C	Introduction to Scientific Programming/C	4
CS 419	Computer Science for Engineers and Scientists	4
ECE 401	Perspectives in Electrical and Computer Engineering	4
ECE 541	Electric Circuits	4
ECE 543	Introduction to Digital Systems	4
ECE 548	Electronic Design I	4
ECE 562	Computer Organization	4
ECE 602	Engineering Analysis	3
ECE 603	Electromagnetic Fields and Waves I	3
ECE 633	Signals and Systems I	3
ECE 634	Signals and Systems II	3
ECE 647	Random Processes and Signals in Engineering	3
ECE 652	Electronic Design II	6
ECE 653	Electronic Design III	6
ECON 402	Principles of Economics (Micro)	4
or NR 411	Environmental and Resource Economics Perspectives	
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 645	Linear Algebra for Applications	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
Capstone		
ECE 791	Senior Project I	3
ECE 792	Senior Project II	3

Professional Electives	
Select four ECE 700-level courses [1]	16
Other Courses	
Discovery requirements not already covered by required courses [2]	24
Total Credits	**129**

[1] Four professional electives must be selected as follows:
- Select any of four ECE 700-level courses, one course could be ECE 583 Designing with Programmable Logic
- Students are allowed to take only one ECE 795 Electrical and Computer Engineering Projects or ECE 796 Special Topics

[2] Fulfilling the EE Program curriculum taking ECE 401 Perspectives in Electrical and Computer Engineering, ECE 791 Senior Project I, and ECE 792 Senior Project II curriculum will automatically meet Discovery Category, "Environment, Technology and Society."

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ECE 401	Perspectives in Electrical and Computer Engineering	4
MATH 425	Calculus I	4
CS 410C	Introduction to Scientific Programming/C	4
ECON 402 or NR 411	Principles of Economics (Micro) [1] or Environmental and Resource Economics Perspectives	4
	Credits	**16**
Spring		
PHYS 407	General Physics I	4
ENGL 401	First-Year Writing	4
MATH 426	Calculus II	4
CS 419	Computer Science for Engineers and Scientists	4
	Credits	**16**
Second Year		
Fall		
ECE 541	Electric Circuits	4
ECE 543	Introduction to Digital Systems	4
PHYS 408	General Physics II	4
MATH 527	Differential Equations with Linear Algebra	4
	Credits	**16**
Spring		
ECE 548	Electronic Design I	4
ECE 562	Computer Organization	4
MATH 645	Linear Algebra for Applications	4
Discovery Program Category		4
	Credits	**16**
Third Year		
Fall		
ECE 602	Engineering Analysis	3
ECE 633	Signals and Systems I	3
ECE 652	Electronic Design II	6
Discovery Program Category		4
	Credits	**16**
Spring		
ECE 603	Electromagnetic Fields and Waves I	3
ECE 634	Signals and Systems II	3
ECE 647	Random Processes and Signals in Engineering	3
ECE 653	Electronic Design III	6
Discovery Program Category		4
	Credits	**19**
Fourth Year		
Fall		
ECE 791	Senior Project I [3]	3
Two Professional Electives [2]		8
Discovery Program Category		4
	Credits	**15**
Spring		
ECE 792	Senior Project II [3]	3
Two Professional Electives [2]		8
Discovery Program Category		4
	Credits	**15**
	Total Credits	**129**

[1] Students are required to take either ECON 402 Principles of Economics (Micro) or NR 411 Environmental and Resource Economics Perspectives to fulfill the Social Science Category of the Discovery Program.

[2] Four professional electives must be selected as follows:
- Choose any of four ECE 700-level courses, one course could be ECE 583 Designing with Programmable Logic
- Students are allowed to take only one ECE 795 Electrical and Computer Engineering Projects or ECE 796 Special Topics

[3] ECE 791 Senior Project I and ECE 792 Senior Project II fulfill Discovery Program Capstone Experience.

Fulfilling the EE Program curriculum taking ECE 401 Perspectives in Electrical and Computer Engineering, ECE 791 Senior Project I, and ECE 792 Senior Project II will automatically meet Discovery Category, "Environment, Technology and Society."

Student Learning Outcomes

The Department of Electrical and Computer Engineering has adopted a set of student outcomes that consists of statements describing what students are expected to know and be able to do by the time of graduation, the achievement of which indicates that the student is equipped to achieve the program objectives.

The current student outcomes are:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Electrical Engineering Major: Biomedical Engineering Option (B.S.)

https://www.unh.edu/program/bachelor-science/electrical-engineering-biomedical-engineering

Description

The Biomedical Engineering (BME) Option is intended to provide the core of knowledge expected of a computer and/or electrical engineer to provide engineering services in the biomedical field. Electrical and/or computer engineers with this option in biomedical engineering combine engineering principles with medical and biological sciences to design and create equipment, devices, computer systems, and software used in healthcare. The BME option is embedded in both the Electrical Engineering (EE) program and the Computer Engineering (CE) program.

The Electrical Engineering (B Sci in Electrical Engineering) program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 129 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In addition to Discovery Program requirements, the department has a number of grade-point average and course requirements.

1. Any electrical engineering major whose cumulative grade-point average in ECE courses is less than 2.0 during any three semesters will not be allowed to continue as an electrical engineering major.
2. Electrical engineering majors must achieve a 2.0 grade-point average in all ECE and CS courses as a requirement for graduation.

To make an exception to any of these departmental requirements based on extenuating circumstances, students must petition the department's undergraduate committee. Mindful of these rules, students, with their advisor's assistance, should plan their programs based on the distribution of courses found in the Degree Plan tab.

Code	Title	Credits
Required Courses		
BMS 508	Human Anatomy and Physiology II	4
CS 410C	Introduction to Scientific Programming/C	4
CS 419	Computer Science for Engineers and Scientists	4
ECE 401	Perspectives in Electrical and Computer Engineering	4
ECE 541	Electric Circuits	4
ECE 543	Introduction to Digital Systems	4
ECE 548	Electronic Design I	4
ECE 562	Computer Organization	4
ECE 602	Engineering Analysis	3
ECE 603	Electromagnetic Fields and Waves I	3
ECE 633	Signals and Systems I	3
ECE 634	Signals and Systems II	3
ECE 647	Random Processes and Signals in Engineering	3
ECE 652	Electronic Design II	6
ECE 653	Electronic Design III	6
ECON 402	Principles of Economics (Micro)	4
or NR 411	Environmental and Resource Economics Perspectives	
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527	Differential Equations with Linear Algebra	4
MATH 645	Linear Algebra for Applications	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
Capstone		
ECE 791	Senior Project I	3
ECE 792	Senior Project II	3
Professional Electives		
Select one professional elective course [1]		4
Biomedical Engineering Option Required Courses		
ECE 717	Introduction to Digital Image Processing	4
ECE 784	Biomedical Instrumentation	4
CHBE 762	Biomedical Engineering	4
or CHBE 766	Biomaterials	
Other Courses		
Discovery requirements not already covered by required courses [2]		20
Total Credits		**129**

[1] Professional elective must be selected as follows:
- Select one ECE 700-level course
- Students are allowed to take only one ECE 795 Electrical and Computer Engineering Projects or ECE 796 Special Topics

[2] Fulfilling the EE Program curriculum taking ECE 401 Perspectives in Electrical and Computer Engineering, ECE 791 Senior Project I, and ECE 792 Senior Project II curriculum will automatically meet Discovery Category, "Environment, Technology and Society."

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ECE 401	Perspectives in Electrical and Computer Engineering	4
CS 410C	Introduction to Scientific Programming/C	4
MATH 425	Calculus I	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Spring		
PHYS 407	General Physics I	4
MATH 426	Calculus II	4
BMS 508	Human Anatomy and Physiology II	4
CS 419	Computer Science for Engineers and Scientists	4
	Credits	**16**
Second Year		
Fall		
ECE 541	Electric Circuits	4
ECE 543	Introduction to Digital Systems	4
MATH 527	Differential Equations with Linear Algebra	4
PHYS 408	General Physics II	4
	Credits	**16**
Spring		
ECE 548	Electronic Design I	4
ECE 562	Computer Organization	4
MATH 645	Linear Algebra for Applications	4
ECON 402 or NR 411	Principles of Economics (Micro) [1] or Environmental and Resource Economics Perspectives	4
	Credits	**16**
Third Year		
Fall		
ECE 602	Engineering Analysis	3
ECE 633	Signals and Systems I	3
ECE 652	Electronic Design II	6
Discovery Program Category		4
	Credits	**16**
Spring		
ECE 603	Electromagnetic Fields and Waves I	3
ECE 634	Signals and Systems II	3
ECE 647	Random Processes and Signals in Engineering	3
ECE 653	Electronic Design III	6
Discovery Program Category		4
	Credits	**19**
Fourth Year		
Fall		
ECE 791	Senior Project I	3
CHBE 762 or CHBE 766	Biomedical Engineering or Biomaterials	4
Professional Elective [2]		4
Discovery Program Category		4
	Credits	**15**
Spring		
ECE 792	Senior Project II	3
ECE 784	Biomedical Instrumentation	4
ECE 717	Introduction to Digital Image Processing	4
Discovery Program Category		4
	Credits	**15**
	Total Credits	**129**

[1] Students are required to take either ECON 402 Principles of Economics (Micro) or NR 411 Environmental and Resource Economics Perspectives to fulfill the Social Science Category of the Discovery Program.

[2] One professional elective must be selected as follows:

- Select any one ECE 700-level course.

ECE 791 Senior Project I and ECE 792 Senior Project II fulfill Discovery Program Capstone Experience.

Fulfilling the EE Program Biomedical Option curriculum taking ECE 401 Perspectives in Electrical and Computer Engineering, ECE 791 Senior Project I, and ECE 792 Senior Project II will automatically meet Discovery Category, "Environment, Technology and Society."

Student Learning Outcomes

The Department of Electrical and Computer Engineering has adopted a set of student outcomes that consists of statements describing what students are expected to know and be able to do by the time of graduation, the achievement of which indicates that the student is equipped to achieve the program objectives. The current student outcomes are:

Program Learning Outcomes

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must

consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Electrical and Computer Engineering Minor

https://www.unh.edu/program/minor/electrical-computer-engineering

Description

The Department of Electrical and Computer Engineering encourages highly motivated students outside of the ECE department are encouraged to consider a minor in Electrical and Computer Engineering.

For additional information please contact the ECE Department. Our ECE Minor Faculty Advisor will be happy to answer any questions and help you select courses that best fit your career goals.

Requirements

Academic policies related to Minors.

Required Courses

Code	Title	Credits
ECE 541	Electric Circuits (or ECE 537 with grade of A/A-)	4
ECE 548	Electronic Design I	4
ECE 543	Introduction to Digital Systems	4
Two additional approved ECE courses (500 level or higher) approved by the ECE Undergraduate Curriculum Committee.		

Environmental Sciences

The College of Engineering and Physical Sciences (CEPS) and the College of Life Sciences and Agriculture (COLSA) jointly offer a bachelor of science degree in environmental sciences. The Program has four options, and specific course requirements for the major vary by option. The geosystems and hydrology options are both managed by the Department of Earth Sciences in CEPS, and the ecosystems and soil and watershed management options are both managed by the Department of Natural Resources and the Environment in COLSA.

Environmental sciences, an interdisciplinary field, focuses on the interaction of biological, chemical, and physical processes that shape our natural environment. Students graduating with a degree in environmental sciences will have an understanding of these interacting processes, the ability to communicate effectively with both scientific and lay audiences, competency in field methods appropriate for entry-level environmental science positions, competency in the use and application of Geographic Information Systems (GIS), a basic understanding of environmental policy, and the ability to contribute to multidisciplinary teams. The University of New Hampshire is a recognized leader in environmental sciences research, and the environmental sciences program capitalizes on faculty expertise in this area. The full-time faculty members comprising this program have major teaching and research emphases in the areas of biogeochemical cycling, environmental chemistry, ecosystem science, geospatial science, global change, hydrology, plant ecology, soil science, and water resource management.

Employment opportunities include environmental consulting firms, educational facilities (e.g., science centers), environmental monitoring laboratories (e.g., water treatment plants; the Environmental Protection Agency), government agencies (e.g., the U.S. Geological Survey, Bureau of Land Management, Natural Resource Conservation Service), university and government research laboratories, and nongovernment environmental organizations. The environmental sciences program also constitutes an excellent preparation for graduate programs in several areas relating to the environment. Students should consult with their adviser early if their goals include further study.

Programs

- Environmental Sciences Major: Earth Systems Option (B.S.) (p. 126)
- Environmental Sciences Major: Ecosystems Option (B.S.) (p. 416)
- Environmental Sciences Major: Soil and Watersheds Option (B.S.) (p. 418)

Materials Science

Programs

- Materials Science Minor (p. 138)

Materials Science Minor

https://www.unh.edu/program/minor/materials-science

Description

Materials science is an interdisciplinary field that involves the research, development, and design of new materials. In the past century, materials scientists have enabled major technological advances in areas such as electronic materials for semiconductors, new metal alloys for aircraft and automotive applications, and new polymers for a host of medical and consumer applications. In order to prepare students for continuing growth and innovation in materials science, the materials science program offers this minor, which is open to all students as UNH.

The minor offers a broad introduction to materials science, which reflects the interdisciplinary nature of the field. Students interested in the minor should contact the director of the materials science program Professor James.Krzanowski@unh.edu (james.krzanowski@unh.edu) as early as possible and preferably before the end of their sophomore year.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required		
ME 561	Introduction to Materials Science [1]	4
Group A: Thermodynamics, Kinetics and Structure of Materials		
Select one of the following:		4-5

CHEM 683 & CHEM 685	Physical Chemistry I and Physical Chemistry Laboratory [2]	
PHYS 508	Thermodynamics and Statistical Mechanics [2,3]	
ME 795	Special Topics	
Group B: Materials Applications and Properties		
Select one of the following:		4-5
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	
CHEM 547 & CHEM 549	Organic Chemistry I and Organic Chemistry Laboratory	
CHEM 651 & CHEM 653	Organic Chemistry I and Organic Chemistry Laboratory	
PHYS 718	Quantum Materials	
ME 786	Introduction to Finite Element Analysis	
ME 795	Special Topics	
Select two to three additional courses from either Group A or Group B [4]		4-6

1 It is strongly recommended that students take this course during their sophomore year.

2 Students cannot receive credit towards the minor for both PHYS 508 Thermodynamics and Statistical Mechanics and CHEM 683 Physical Chemistry I/CHEM 685 Physical Chemistry Laboratory.

3 Students cannot receive credit towards the minor for PHYS 508 Thermodynamics and Statistical Mechanics if they have taken ME 503 Thermodynamics.

4 As needed to reach the required 18 credits

Mathematics and Statistics

The Department of Mathematics and Statistics offers a variety of programs leading to five different degrees:

- B.A. degree: mathematics major;
- B.S. in mathematics degree;
- B.S. in applied mathematics degree;
- B.S. in mathematics education degree; and
- B.S. in statistics degree.

These programs provide flexibility through elective choices and are designed to maximize educational and employment opportunities. Each student must enroll in one specific program; however, changes between programs usually can be accommodated.

The first two years of all programs are similar. In the first year, students are expected to take MATH 425 Calculus I and MATH 426 Calculus II, as well as an introductory programming course (either MATH 445 Mathematics and Applications with MATLAB or CS 410C Introduction to Scientific Programming/C or CS 410P Introduction to Scientific Programming/Python). A sophomore typically takes follow-up calculus courses in MATH 527 Differential Equations with Linear Algebra and MATH 528 Multidimensional Calculus, MATH 539 Introduction to Statistical Analysis, and MATH 531 Mathematical Proof. The senior capstone experience is fulfilled by a variety of designated courses in each of the degree programs; specific details are given in each program's course listing below.

For more information about the department's undergraduate programs, visit http://ceps.unh.edu/mathematics-statistics

Standards for Graduation

In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.

Minoring in Mathematics

The Department of Mathematics and Statistics offers four minor programs: mathematics, applied mathematics, mathematics education, and statistics. These programs, which are open to all students enrolled at the University, require a minimum of five MATH courses as detailed in this catalog. Students whose major program requires more than two courses required by the minor program must substitute additional courses from the list of elective courses to meet the five-course minimum.

https://ceps.unh.edu/mathematics-statistics

Programs

- Applied Mathematics Major (B.S.) (p. 139)
- Applied Mathematics Major: Computation Option (B.S.) (p. 141)
- Applied Mathematics Major: Economics Option (B.S.) (p. 142)
- Applied Mathematics Minor (p. 144)
- Mathematics Education Major (B.S.) (p. 144)
- Mathematics Education Minor (p. 147)
- Mathematics Major (B.A.) (p. 147)
- Mathematics Major (B.S.) (p. 149)
- Mathematics Minor (p. 150)
- Statistics Major (B.S.) (p. 151)
- Statistics Minor (p. 152)

Faculty

Mathematics and Statistics Department Faculty

Applied Mathematics Major (B.S.)

https://www.unh.edu/program/bachelor-science/applied-mathematics

Description

This degree prepares students for careers in science, engineering, and industry by giving students broad exposure to both theoretical and computational models of physical systems in the physical, natural, and social sciences.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.

Major GPA requirements as indicated.

Major Requirements

In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.

Code	Title	Credits
Required Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 445	Mathematics and Applications with MATLAB	4
or IAM 550	Introduction to Engineering Computing	
MATH 527	Differential Equations with Linear Algebra [1]	4
MATH 528	Multidimensional Calculus [1]	4
MATH 531	Mathematical Proof	4
MATH 545	Introduction to Linear Algebra [2]	4
or MATH 645	Linear Algebra for Applications	
MATH 644	Statistics for Engineers and Scientists	4
MATH 745	Foundations of Applied Mathematics I	4
MATH 753	Introduction to Numerical Methods I	4
MATH 757	Mathematical Optimization for Applications	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
CS 415 & CS 416	Introduction to Computer Science I and Introduction to Computer Science II	8
Capstone		
Select one course from the following:		4
MATH 797	Senior Seminar	
MATH 798	Senior Project	
MATH 799	Senior Thesis	
Electives		
Select one (1) approved 700-level CEPS course in consultation with academic advisor		4
Select three courses from the following:		12
MATH 647	Complex Analysis for Applications	
or MATH 788	Complex Analysis	
MATH 734	Statistical Computing	
MATH 738	Data Mining and Predictive Analytics	
or CS 750	Machine Learning	
MATH 739	Applied Regression Analysis	
MATH 747	Introduction to Nonlinear Dynamics and Chaos	
MATH 755	Probability with Applications	
MATH 767	One-Dimensional Real Analysis	
MATH 772	Combinatorics	
Total Credits		**80**

1 The full Linearity sequence, MATH 525 & MATH 526, may be used to replace the MATH 527, MATH 528, and MATH 545 / MATH 645 requirements.

2 MATH 525 may be used to replace the MATH 545 or MATH 645 requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MATH 425	Calculus I	4
CS 415	Introduction to Computer Science I	4
Discovery Course		4
Inquiry Course		4
MATH 400	Freshman Seminar	1
	Credits	**17**
Spring		
MATH 426	Calculus II	4
MATH 445 or IAM 550	Mathematics and Applications with MATLAB or Introduction to Engineering Computing	4
CS 416	Introduction to Computer Science II	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Second Year		
Fall		
MATH 527	Differential Equations with Linear Algebra	4
PHYS 407	General Physics I	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
MATH 528	Multidimensional Calculus	4
MATH 531	Mathematical Proof	4
PHYS 408	General Physics II	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
MATH 545 or MATH 645	Introduction to Linear Algebra or Linear Algebra for Applications	4
MATH 644	Statistics for Engineers and Scientists	4
MATH 753	Introduction to Numerical Methods I	4
Discovery Course		4
	Credits	**16**
Spring		
MATH 757	Mathematical Optimization for Applications	4
CEPS 700-level elective		4
Discovery Course		4
Elective		4
	Credits	**16**

Fourth Year		
Fall		
MATH 745	Foundations of Applied Mathematics I	4
Writing Intensive Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
MATH 797 or MATH 798 or MATH 799	Senior Seminar or Senior Project or Senior Thesis	4
Writing Intensive Course		4
Elective		4
Free Elective		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

- Students recognize common mathematical notations and operations used in mathematics, science and engineering.
- Students can recognize and classify a variety of mathematical models including differential equations, linear and nonlinear systems of algebraic equations, and common probability distributions.
- Students have developed a working knowledge (including notation, terminology, foundational principles of the discipline, and standard mathematical models within the discipline) in at least one discipline outside of mathematics.
- Students are able to extract useful knowledge, both quantitative and qualitative, from mathematical models and can apply that knowledge to the relevant discipline.

Applied Mathematics Major: Computation Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-mathematics-computation

Description

This degree program prepares students for employment and/or graduate study in a variety of fields and research specializations in which mathematics plays a critical role in the solution of important scientific and technological problems.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.

Code	Title	Credits
Required Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 445	Mathematics and Applications with MATLAB	4
or IAM 550	Introduction to Engineering Computing	
MATH 527	Differential Equations with Linear Algebra [1]	4
MATH 528	Multidimensional Calculus [1]	4
MATH 531	Mathematical Proof	4
MATH 644	Statistics for Engineers and Scientists	4
MATH 645	Linear Algebra for Applications [1]	4
MATH 753	Introduction to Numerical Methods I	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
Capstone		
Select one of the following:		4
MATH 797	Senior Seminar	
MATH 798	Senior Project	
MATH 799	Senior Thesis	
Total Credits		**44**

Code	Title	Credits
Computation Option Requirements		
MATH 745	Foundations of Applied Mathematics I	4
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
CS 415	Introduction to Computer Science I	4
CS 416	Introduction to Computer Science II	4
CS 420	Foundations of Programming for Digital Systems	4
CS 515	Data Structures and Introduction to Algorithms	4
CS 659	Introduction to the Theory of Computation	4
CS 758	Algorithms	4
IAM 751	Introduction to High-Performance Computing	4
Select one elective in consultation with academic advisor		4
Total Credits		**40**

[1] The full Linearity sequence, MATH 525 and MATH 526, may be used to replace the MATH 527, MATH 528, and MATH 645 requirements. MATH 525 may be used to replace the MATH 645 requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MATH 425	Calculus I	4
CS 415	Introduction to Computer Science I	4
Discovery Course		4
Inquiry Course		4
MATH 400	Freshman Seminar	1
	Credits	**17**
Spring		
MATH 426	Calculus II	4
MATH 445 or IAM 550	Mathematics and Applications with MATLAB or Introduction to Engineering Computing	4
CS 416	Introduction to Computer Science II	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Second Year		
Fall		
MATH 528	Multidimensional Calculus	4
MATH 531	Mathematical Proof	4
PHYS 407	General Physics I	4
CS 420	Foundations of Programming for Digital Systems	4
	Credits	**16**
Spring		
MATH 527	Differential Equations with Linear Algebra	4
MATH 644	Statistics for Engineers and Scientists	4
PHYS 408	General Physics II	4
CS 515	Data Structures and Introduction to Algorithms	4
	Credits	**16**
Third Year		
Fall		
MATH 753	Introduction to Numerical Methods I	4
CS 659	Introduction to the Theory of Computation	4
Discovery Course		4
Elective Course		
	Credits	**12**
Spring		
MATH 645	Linear Algebra for Applications	4
IAM 751	Introduction to High-Performance Computing	4
CS 758	Algorithms	4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
MATH 745	Foundations of Applied Mathematics I	4
Discovery Course		4
Discovery Course		4
Writing Intensive Course		4
	Credits	**16**
Spring		
MATH 797 or MATH 798 or MATH 799	Senior Seminar or Senior Project or Senior Thesis	4
Discovery Course		4
Writing Intensive Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**125**

Student Learning Outcomes

Program Learning Outcomes

- Students recognize common mathematical notations and operations used in mathematics, science and engineering.
- Students can recognize and classify a variety of mathematical models including differential equations, linear and nonlinear systems of algebraic equations, and common probability distributions.
- Students have developed a working knowledge (including notation, terminology, foundational principles of the discipline, and standard mathematical models within the discipline) in at least one discipline outside of mathematics.
- Students are able to extract useful knowledge, both quantitative and qualitative, from mathematical models and can apply that knowledge to the relevant discipline.

Applied Mathematics Major: Economics Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-mathematics-economics

Description

This degree program prepares students for employment and/or graduate study in a variety of fields and research specializations in which mathematics plays a critical role in the solution of important scientific and technological problems.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.

Code	Title	Credits
Required Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 445	Mathematics and Applications with MATLAB	4
or IAM 550	Introduction to Engineering Computing	
MATH 527	Differential Equations with Linear Algebra [1]	4
MATH 528	Multidimensional Calculus [1]	4
MATH 531	Mathematical Proof	4
MATH 539	Introduction to Statistical Analysis	4
MATH 645	Linear Algebra for Applications [1]	4
MATH 753	Introduction to Numerical Methods I	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
Capstone		
Select one of the following:		4
MATH 797	Senior Seminar	
MATH 798	Senior Project	
MATH 799	Senior Thesis	
Total Credits		**44**

Code	Title	Credits
Economics Option Requirements		
MATH 739	Applied Regression Analysis	4
MATH 755	Probability with Applications	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
ECON 605	Intermediate Microeconomic Analysis	4
ECON 611	Intermediate Macroeconomic Analysis	4
ECON 726	Introduction to Econometrics	4
ONE approved MATH elective at the 700-level, selected in consultation with the academic advisor		4
ONE approved ECON or DS elective at the 700-level, selected in consultation with the academic advisor		4
Total Credits		**36**

[1] The full Linearity sequence, MATH 525 and MATH 526, may be used to replace the MATH 527, MATH 528, and MATH 645 requirements. MATH 525 may be used to replace the MATH 645 requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MATH 425	Calculus I	4
ECON 401	Principles of Economics (Macro)	4
Discovery Course		4
Inquiry Course		4
MATH 400	Freshman Seminar	1
	Credits	**17**
Spring		
MATH 426	Calculus II	4
MATH 445 or IAM 550	Mathematics and Applications with MATLAB or Introduction to Engineering Computing	4
ECON 402	Principles of Economics (Micro)	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Second Year		
Fall		
MATH 528	Multidimensional Calculus	4
MATH 531	Mathematical Proof	4
PHYS 407	General Physics I	4
ECON 605	Intermediate Microeconomic Analysis	4
	Credits	**16**
Spring		
MATH 527	Differential Equations with Linear Algebra	4
MATH 539	Introduction to Statistical Analysis	4
ECON 611	Intermediate Macroeconomic Analysis	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
MATH 645	Linear Algebra for Applications	4
MATH 739	Applied Regression Analysis	4
ECON or DS Elective Course		4
Discovery Course		4
	Credits	**16**
Spring		
ECON 726	Introduction to Econometrics	4
700-level MATH Elective Course		4
Discovery Course		4
Writing Intensive Course		4
	Credits	**16**
Fourth Year		
Fall		
MATH 753	Introduction to Numerical Methods I	4
MATH 755	Probability with Applications	4
Discovery Course		4
Elective Course		4
	Credits	**16**
Spring		
MATH 797 or MATH 798 or MATH 799	Senior Seminar or Senior Project or Senior Thesis	4
Writing Intensive Course		4
Elective Course		4

Elective Course	4
Credits	**16**
Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

- Students recognize common mathematical notations and operations used in mathematics, science and engineering.
- Students can recognize and classify a variety of mathematical models including differential equations, linear and nonlinear systems of algebraic equations, and common probability distributions.
- Students have developed a working knowledge (including notation, terminology, foundational principles of the discipline, and standard mathematical models within the discipline) in at least one discipline outside of mathematics.
- Students are able to extract useful knowledge, both quantitative and qualitative, from mathematical models and can apply that knowledge to the relevant discipline.

Applied Mathematics Minor

https://www.unh.edu/program/minor/applied-mathematics

Description

This minor program introduces students to variety of fields and research specializations in which mathematics plays a critical role in the solution of important scientific and technological problems.

For further information, please contact the minor coordinator located on the department website.

Requirements

Academic policies related to Minors.

The minor requires a minimum of five MATH courses (20 credits). Students are responsible for completing any applicable pre-requisite courses.

Code	Title	Credits
Required Courses		
MATH 528	Multidimensional Calculus [1]	4
MATH 645	Linear Algebra for Applications [1]	4
MATH 745	Foundations of Applied Mathematics I	4
MATH 753	Introduction to Numerical Methods I	4
Elective		
Select one course from the following:		4
MATH 647	Complex Analysis for Applications	
MATH 747	Introduction to Nonlinear Dynamics and Chaos	
MATH 755	Probability with Applications	
MATH 757	Mathematical Optimization for Applications	
Total Credits		**20**

[1] This requirement may be satisfied by MATH 525 Linearity I & MATH 526 Linearity II.

Mathematics Education Major (B.S.)

https://www.unh.edu/program/bachelor-science/mathematics-education

Description

This professional degree program prepares students for teaching mathematics at the middle or high school level. The program is coordinated with the education department's teacher licensure programs. Students may complete the degree requirements with full teacher licensure in either four or five years.

Students electing the four-year option leading to licensure must plan for one semester of student teaching in their senior year; this requires careful planning with your program advisor to accommodate the scheduling of required MATH courses.

The five-year program includes a year-long teaching internship in the fifth year. The internship requires admission into a UNH Department of Education graduate program that leads to licensure.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Requirements for admission to student teaching include receiving credit for EDUC 500 and a minimum cumulative 2.8 GPA.
- In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.
- For teacher licensure a grade of B- or better is required in all Education courses.

Code	Title	Credits
Required MATH Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 445	Mathematics and Applications with MATLAB	4
or CS 410P	Introduction to Scientific Programming/Python	
or CS 410C	Introduction to Scientific Programming/C	
MATH 531	Mathematical Proof	4
MATH 539	Introduction to Statistical Analysis	4
or MATH 644	Statistics for Engineers and Scientists	
MATH 545	Introduction to Linear Algebra	4
or MATH 645	Linear Algebra for Applications	
or MATH 525	Linearity I	

MATH 624	Analysis of Secondary School Mathematics A (Number Systems & Functions)	4
MATH 626	Analysis of Secondary School Mathematics B (Geometry, Statistics, & Probability)	4
MATH 700	Introduction to Mathematics Education	4
MATH 760	Geometry	4
MATH 790	Historical Foundations of Mathematics	4
Capstone		
Select one of the following:		
MATH 797	Senior Seminar	
MATH 799	Senior Thesis	
Required EDUC Courses		
EDUC 500	Exploring Teaching	4
EDUC 605	Educational Perspectives in Critical Times	4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
Middle Level Pathway Requirements		
MATH 601	Exploring Mathematics for Teachers I	4
MATH 703	Teaching of Mathematics in Grades K-6	4
or MATH 709	Teaching of Mathematics in Grades 6-12	
Select one MATH elective from the following, chosen in consultation with academic advisor:		4
MATH 527	Differential Equations with Linear Algebra [1]	
MATH 528	Multidimensional Calculus [1]	
MATH 761	Abstract Algebra	
MATH 767	One-Dimensional Real Analysis	
MATH 770	Foundations of Number Theory	
MATH 772	Combinatorics	
Upper Level Pathway Requirements		
MATH 709	Teaching of Mathematics in Grades 6-12	4
MATH 761	Abstract Algebra	4
Select one MATH elective from the following, chosen in consultation with academic advisor:		4
MATH 527	Differential Equations with Linear Algebra [1]	
MATH 528	Multidimensional Calculus [1]	
MATH 767	One-Dimensional Real Analysis	
MATH 770	Foundations of Number Theory	
MATH 772	Combinatorics	

[1] The full Linearity sequence, MATH 525 Linearity I and MATH 526 Linearity II, may be used to replace MATH 527 Differential Equations with Linear Algebra, MATH 528 Multidimensional Calculus, and MATH 545 Introduction to Linear Algebra, MATH 645 Linear Algebra for Applications.

Note: EDUC 751B Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions is a requirement for licensure and may be taken as an undergraduate.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

Middle Level Pathway

First Year

Fall		**Credits**
MATH 425	Calculus I	4
ENGL 401	First-Year Writing	4
Discovery Course		4
Inquiry Course		4
MATH 400	Freshman Seminar	1
	Credits	**17**
Spring		
MATH 426	Calculus II	4
MATH 445 or CS 410P or CS 410C	Mathematics and Applications with MATLAB or Introduction to Scientific Programming/Python or Introduction to Scientific Programming/C	4
Discovery Course		4
Discovery Course		4
	Credits	**16**

Second Year

Fall		
MATH 531	Mathematical Proof	4
MATH 539 or MATH 644	Introduction to Statistical Analysis or Statistics for Engineers and Scientists	4
EDUC 500	Exploring Teaching	4
Discovery Course		4
	Credits	**16**
Spring		
MATH 601	Exploring Mathematics for Teachers I	4
MATH 545 or MATH 645 or MATH 525	Introduction to Linear Algebra or Linear Algebra for Applications or Linearity I	4
MATH 790	Historical Foundations of Mathematics	4
Discovery Course		4
	Credits	**16**

Third Year

Fall		
MATH 700	Introduction to Mathematics Education	4
MATH 760	Geometry	4
Discovery Course		4
Elective Course		4
	Credits	**16**
Spring		
MATH 624	Analysis of Secondary School Mathematics A (Number Systems & Functions)	4
MATH 703 or MATH 709	Teaching of Mathematics in Grades K-6 or Teaching of Mathematics in Grades 6-12	4
EDUC 605	Educational Perspectives in Critical Times	4
Elective Course		4
	Credits	**16**

Fourth Year

Fall		
MATH 626	Analysis of Secondary School Mathematics B (Geometry, Statistics, & Probability)	4
MATH elective		4
Discovery Course		4
Elective Course		4
	Credits	**16**
Spring		
MATH 797	Senior Seminar	4

EDUC 701	Human Development & Learning: Cultural Perspectives	4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**129**

Upper Level Pathway

First Year

Fall		**Credits**
MATH 425	Calculus I	4
ENGL 401	First-Year Writing	4
Discovery Course		4
Inquiry Course		4
MATH 400	Freshman Seminar	1
	Credits	**17**
Spring		
MATH 426	Calculus II	4
MATH 445 or CS 410P or CS 410C	Mathematics and Applications with MATLAB or Introduction to Scientific Programming/Python or Introduction to Scientific Programming/C	4
Discovery Course		4
Discovery Course		4
	Credits	**16**

Second Year

Fall		
MATH 531	Mathematical Proof	4
MATH 539 or MATH 644	Introduction to Statistical Analysis or Statistics for Engineers and Scientists	4
EDUC 500	Exploring Teaching	4
Discovery Course		4
	Credits	**16**
Spring		
MATH 545 or MATH 645 or MATH 525	Introduction to Linear Algebra or Linear Algebra for Applications or Linearity I	4
MATH 790	Historical Foundations of Mathematics	4
Discovery Course		4
Elective Course		4
	Credits	**16**

Third Year

Fall		
MATH 700	Introduction to Mathematics Education	4
MATH 760	Geometry	4
Discovery Course		4
Elective Course		4
	Credits	**16**
Spring		
MATH 624	Analysis of Secondary School Mathematics A (Number Systems & Functions)	4
MATH 709	Teaching of Mathematics in Grades 6-12	4
EDUC 605	Educational Perspectives in Critical Times	4
Elective Course		4
	Credits	**16**

Fourth Year

Fall		
MATH 626	Analysis of Secondary School Mathematics B (Geometry, Statistics, & Probability)	4
MATH 761	Abstract Algebra	4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
MATH 797	Senior Seminar	4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
MATH Elective		4
Elective Course		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

Mathematics Concepts, Practices, and Curriculum. Well-prepared beginning teachers of mathematics:

- Demonstrate robust knowledge of mathematical and statistical concepts that underlie what they encounter in teaching of K-8 or secondary mathematics.
- Engage in appropriate mathematical and statistical practices, and use technological tools to solve mathematical problems, and incorporate educational technology in their teaching.
- Analyze and interpret mathematical curricula, assessments, and standards documents.
- Analyze and interpret students' mathematical work.

Pedagogical Knowledge and Practices for Teaching Mathematics. Well-prepared beginning teachers of mathematics:

- Demonstrate strong foundations of pedagogical knowledge, and effective and equitable mathematics teaching practices.
- Construct instructional explanations, develop tasks, lesson plans and unit plans, that advance students' mathematical understanding.
- Recognize common patterns of student thinking related to particular mathematical topics, and articulate ways of supporting students' mathematical thinking.

Productive dispositions. Well-prepared beginning teachers:

- Demonstrate positive and productive dispositions toward mathematics as a discipline, towards students as learners of mathematics and towards teaching mathematics in ways that support students' sense making, understanding, and reasoning.

Disclosures

Mathematics Education (B.S.)

Location/Delivery: College of Engineering and Physical Sciences, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Mathematics Middle or Upper Level

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Mathematics Education Minor

https://www.unh.edu/program/minor/mathematics-education

Description

Students pursuing a minor in Mathematics Education will be required to take courses that introduce them to teaching, mathematics education topics, and mathematical content to solidify their understanding of secondary mathematics. In addition to the required courses, students will choose electives of interest from options in Education and Mathematics, in consultation with the minor advisor.

Completion of this minor does not lead to teaching certification. Students should meet with the minor advisor to discuss potential pathways and to determine what additional courses are needed.

For further information, please contact the minor coordinator located on the department website.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
MATH 624	Analysis of Secondary School Mathematics A (Number Systems & Functions) [1]	4
or MATH 626	Analysis of Secondary School Mathematics B (Geometry, Statistics, & Probability)	
MATH 700	Introduction to Mathematics Education [1]	4
or MATH 709	Teaching of Mathematics in Grades 6-12	
EDUC 500	Exploring Teaching [1]	4
Electives		
Select one of the following options:		8
Option 1: Select one MATH and one EDUC course from the list below.		
Option 2: Select two MATH courses from the list below. Only one 500-level course may be taken.		
MATH 624	Analysis of Secondary School Mathematics A (Number Systems & Functions) [1]	
or MATH 626	Analysis of Secondary School Mathematics B (Geometry, Statistics, & Probability)	
MATH 531	Mathematical Proof [1]	
MATH 545	Introduction to Linear Algebra [1]	
or MATH 645	Linear Algebra for Applications	
MATH 700	Introduction to Mathematics Education [1]	
or MATH 709	Teaching of Mathematics in Grades 6-12	
MATH 760	Geometry [1]	
MATH 790	Historical Foundations of Mathematics [1]	
MATH 797	Senior Seminar (Math Ed Section) [1]	
EDUC 525	The Idea of Race in Teaching and Learning	
EDUC 556	Peer to Peer Mentoring for Students with Disabilities	
EDUC 605	Educational Perspectives in Critical Times [1]	
EDUC 701	Human Development & Learning: Cultural Perspectives [1]	
EDUC 703C	Classroom Management: Creating Positive Learning Environments	
EDUC 751B	Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions [1]	
Total Credits		**20**

[1] Course is required for the BS in Mathematics Education and/or for teacher certification through UNH. Students in other majors who wish to pursue mathematics teacher certification could take some of these courses as program electives or as part of a master's degree that leads to certification.

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate robust knowledge of mathematical concepts and practices that underlie secondary school mathematics.
- Use technological tools to solve mathematical problems and be able to incorporate educational technology in their teaching.
- Analyze and interpret mathematical curricula, assessments, and standards documents.
- Analyze and interpret students' mathematical work, and articulate ways of supporting students' mathematical thinking.
- Demonstrate strong foundations of pedagogical knowledge and effective and equitable mathematics teaching practices.
- Demonstrate positive and productive dispositions toward mathematics as a discipline, towards students as learners of mathematics and towards teaching mathematics in ways that support students' sense making, understanding, and reasoning.

Mathematics Major (B.A.)

https://www.unh.edu/program/bachelor-arts/mathematics

Description

The bachelor of arts degree with the mathematics major may offer a broader liberal arts program than the bachelor of science degree programs. By a careful selection of electives, students can shape this major into a preparation for graduate school, business, or industry.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.

Code	Title	Credits
Required Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 445	Mathematics and Applications with MATLAB	4
or CS 410P	Introduction to Scientific Programming/Python	
or CS 410C	Introduction to Scientific Programming/C	
MATH 527	Differential Equations with Linear Algebra [1]	4
MATH 528	Multidimensional Calculus [1]	4
MATH 531	Mathematical Proof	4
MATH 539	Introduction to Statistical Analysis	4
MATH 545	Introduction to Linear Algebra [1]	4
or MATH 645	Linear Algebra for Applications	
MATH 761	Abstract Algebra	4
MATH 767	One-Dimensional Real Analysis	4
THREE additional approved MATH courses (selected in consultation with the academic advisor)		12
Capstone		
Select one of the following:		4
MATH 797	Senior Seminar	
MATH 799	Senior Thesis	
Other Required Courses		
Foreign language requirement as defined by the University for all B.A. degrees.		
Total Credits		**56**

[1] The full Linearity sequence, MATH 525 and MATH 526, may be used to replace the MATH 527, MATH 528, and MATH 545 / MATH 645 requirements.
MATH 525 may be used to replace the MATH 545 or MATH 645 requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MATH 425	Calculus I	4
Language Course		4
Discovery Course		4
Inquiry Course		4
MATH 400	Freshman Seminar	1
	Credits	**17**
Spring		
MATH 426	Calculus II	4
MATH 445 or CS 410C or CS 410P	Mathematics and Applications with MATLAB or Introduction to Scientific Programming/C or Introduction to Scientific Programming/Python	4
ENGL 401	First-Year Writing	4
Language Course		4
	Credits	**16**
Second Year		
Fall		
MATH 528	Multidimensional Calculus	4
MATH 539	Introduction to Statistical Analysis	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
MATH 527	Differential Equations with Linear Algebra	4
MATH 531	Mathematical Proof	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
MATH 545 or MATH 645	Introduction to Linear Algebra or Linear Algebra for Applications	4
MATH 761	Abstract Algebra	4
Discovery Course		4
Writing Intensive Course		4
	Credits	**16**
Spring		
MATH 767	One-Dimensional Real Analysis	4
MATH Elective Course		4
Discovery Course		4
Writing Intensive Course		4
	Credits	**16**
Fourth Year		
Fall		
MATH 797 or MATH 799	Senior Seminar or Senior Thesis	4
MATH Elective Course		4
Elective Course		4

Elective Course	4
Credits	**16**
Spring	
MATH Elective Course	4
Elective Course	4
Elective Course	4
Elective Course	4
Credits	**16**
Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

- Students can explain core concepts from a range of different branches of mathematics, including analysis, algebra, calculus and statistics.
- Students can correctly interpret mathematical definitions and construct simple proofs which use definitions and logical arguments to establish properties of mathematical objects.
- Students are aware that mathematical objects may have multiple representations and are able to select representations which clarify problems and simplify calculations.
- Students can recognize valid and invalid mathematical arguments.

Mathematics Major (B.S.)

https://www.unh.edu/program/bachelor-science/mathematics-0

Description

This program offers the strongest concentration in mathematics, requiring courses that are intended to prepare the student for graduate work in mathematics. Through a judicious choice of electives, students may design stronger pre-graduate programs, a program in applied mathematics, or slant the program toward a career in business or industry.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.

Code	Title	Credits
Required Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 445	Mathematics and Applications with MATLAB	4
or CS 410P	Introduction to Scientific Programming/Python	
or CS 410C	Introduction to Scientific Programming/C	
MATH 527	Differential Equations with Linear Algebra [1]	4
MATH 528	Multidimensional Calculus [1]	4
MATH 531	Mathematical Proof	4
MATH 539	Introduction to Statistical Analysis	4
MATH 545	Introduction to Linear Algebra [1]	4
or MATH 645	Linear Algebra for Applications	
MATH 761	Abstract Algebra	4
MATH 763	Abstract Algebra II	4
MATH 767	One-Dimensional Real Analysis	4
MATH 784	Topology	4
MATH 788	Complex Analysis	4
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
Electives		
One MATH elective course (selected in consultation with the academic advisor)		4
Select two additional courses from the following:		8
MATH 760	Geometry	
MATH 765	Introduction to Commutative Algebra and Algebraic Geometry	
MATH 768	Real Analysis II	
MATH 769	Introduction to Differential Geometry	
MATH 770	Foundations of Number Theory	
MATH 772	Combinatorics	
Capstone		
Select one of the following:		4
MATH 797	Senior Seminar	
MATH 799	Senior Thesis	
Total Credits		**76**

[1] The full Linearity sequence, MATH 525 and MATH 526, may be used to replace the MATH 527, MATH 528, and MATH 545 / MATH 645 requirements.
MATH 525 may be used to replace the MATH 545 or MATH 645 requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MATH 425	Calculus I	4
Discovery Course		4
Discovery Course		4
Inquiry Course		4

MATH 400	Freshman Seminar	1
	Credits	**17**
Spring		
MATH 426	Calculus II	4
MATH 445 or CS 410P or CS 410C	Mathematics and Applications with MATLAB or Introduction to Scientific Programming/Python or Introduction to Scientific Programming/C	4
ENGL 401	First-Year Writing	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
MATH 528	Multidimensional Calculus	4
MATH 539	Introduction to Statistical Analysis	4
PHYS 407	General Physics I	4
Discovery Course		4
	Credits	**16**
Spring		
MATH 527	Differential Equations with Linear Algebra	4
MATH 531	Mathematical Proof	4
PHYS 408	General Physics II	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
MATH 545 or MATH 645	Introduction to Linear Algebra or Linear Algebra for Applications	4
MATH 761	Abstract Algebra	4
Discovery Course		4
Writing Intensive Course		4
	Credits	**16**
Spring		
MATH 763	Abstract Algebra II	4
MATH 767	One-Dimensional Real Analysis	4
Writing Intensive Course		4
MATH Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
MATH 784	Topology	4
MATH 797 or MATH 799	Senior Seminar or Senior Thesis	4
MATH Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
MATH 788	Complex Analysis	4
MATH Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

- Students can explain core concepts from a range of different branches of mathematics, including analysis, algebra, calculus and statistics.
- Students can correctly interpret mathematical definitions and construct simple proofs which use definitions and logical arguments to establish properties of mathematical objects.
- Students are aware that mathematical objects may have multiple representations and are able to select representations which clarify problems and simplify calculations.
- Students can recognize valid and invalid mathematical arguments.

Mathematics Minor

https://www.unh.edu/program/minor/mathematics

Description

The mathematics minor will introduce you to central fields of pure mathematics, such as algebra, analysis and geometry. You'll be able to complement the core program requirements with an enticing selection of mathematics electives,including differential geometry, combinatorics, number and set theory, logic and topology. Tailor the minor to enhance a major such as business, economics, education or the sciences to prepare for your future career or graduate studies.

For further information, please contact the minor coordinator located on the department website.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required		
MATH 528	Multidimensional Calculus [1]	4
MATH 531	Mathematical Proof	4
MATH 761	Abstract Algebra	4
or MATH 767	One-Dimensional Real Analysis	
Electives		
Select two courses from the following:		8
MATH 760	Geometry	
MATH 761	Abstract Algebra	
MATH 763	Abstract Algebra II	
MATH 765	Introduction to Commutative Algebra and Algebraic Geometry	
MATH 767	One-Dimensional Real Analysis	
MATH 768	Real Analysis II	
MATH 769	Introduction to Differential Geometry	
MATH 770	Foundations of Number Theory	
MATH 772	Combinatorics	
MATH 783	Set Theory	
MATH 784	Topology	
MATH 788	Complex Analysis	
Total Credits		**20**

[1] This requirement may be satisfied by MATH 525 Linearity I and MATH 526 Linearity II.

Statistics Major (B.S.)

https://www.unh.edu/program/bachelor-science/statistics

Description

This program prepares students for employment and/or graduate study in a variety of fields and research specializations in which statistical analysis and its applications play a critical role. In addition to its degree programs, the department has an active interest in the actuarial profession. Those interested in actuarial science should seek the advice of departmental coordinator of the actuarial program.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.

Code	Title	Credits
Required Courses		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 445	Mathematics and Applications with MATLAB	4
or CS 410P	Introduction to Scientific Programming/Python	
or CS 410C	Introduction to Scientific Programming/C	
MATH 527	Differential Equations with Linear Algebra [1]	4
MATH 528	Multidimensional Calculus [1]	4
MATH 531	Mathematical Proof	4
MATH 539	Introduction to Statistical Analysis	4
MATH 645	Linear Algebra for Applications [1]	4
MATH 739	Applied Regression Analysis	4
MATH 755	Probability with Applications	4
MATH 756	Principles of Statistical Inference	4
Electives: Select TWO approved MATH electives, in consultation with the major advisor (at least one at the 700-level)		8
Select THREE courses from the following:		12
MATH 734	Statistical Computing	
MATH 736	Advanced Statistical Modeling	
MATH 737	Statistical Methods for Quality Improvement and Design	
MATH 740	Design of Experiments I	
MATH 741	Survival Analysis	
MATH 743	Time Series Analysis	
MATH 744	Design of Experiments II	
Capstone		
Select one course from the following:		4
MATH 797	Senior Seminar	
MATH 798	Senior Project	
MATH 799	Senior Thesis	
Total Credits		**68**

[1] The full Linearity sequence, MATH 525 and MATH 526, may be used to replace the MATH 527, MATH 528, and MATH 645 requirements. MATH 525 may be used to replace the MATH 645 requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MATH 425	Calculus I	4
Discovery Course		4
Discovery Course		4
Inquiry Course		4
MATH 400	Freshman Seminar	1
	Credits	**17**
Spring		
MATH 426	Calculus II	4
MATH 445 or CS 410C or CS 410P	Mathematics and Applications with MATLAB or Introduction to Scientific Programming/C or Introduction to Scientific Programming/Python	4
ENGL 401	First-Year Writing	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
MATH 528	Multidimensional Calculus	4
MATH 531	Mathematical Proof	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
MATH 527	Differential Equations with Linear Algebra	4
MATH 539	Introduction to Statistical Analysis	4
Discovery Course		4
Writing Intensive Course		4
	Credits	**16**

Third Year		
Fall		
MATH 645	Linear Algebra for Applications	4
MATH 739	Applied Regression Analysis	4
700-level MATH Elective Course		4
Discovery Course		4
	Credits	**16**
Spring		
700-level MATH Elective Course		4
700-level MATH Elective Course		4
Elective Course		4
Writing Intensive Course		4
	Credits	**16**
Fourth Year		
Fall		
MATH 755	Probability with Applications	4
MATH 797 or MATH 798 or MATH 799	Senior Seminar or Senior Project or Senior Thesis	4
700-level MATH Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
MATH 756	Principles of Statistical Inference	4
MATH Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

- Communicate theoretical foundations and principles of intermediate-level statistics to diverse audiences.
- Design an appropriate method of data collection for a variety of practical applications.
- Perform analyses using the established tools of applied statistics, including production of appropriate software output and its interpretation.

Statistics Minor

https://www.unh.edu/program/minor/statistics

Description

The minor in statistics is designed for students in other majors who want to learn the fundamentals of statistical analysis and its applications.

For further information, please contact the minor coordinator located on the department website.

Requirements

Academic policies related to Minors.

The minor requires a minimum of five MATH courses as detailed in the minor requirements. Additional courses from the list of course electives may be utilized to meet the five-course minimum.

Code	Title	Credits
Required		
MATH 539	Introduction to Statistical Analysis	4
or MATH 644	Statistics for Engineers and Scientists	
MATH 645	Linear Algebra for Applications [1]	4
Electives		
Select three courses from the following:		12
MATH 736	Advanced Statistical Modeling	
MATH 737	Statistical Methods for Quality Improvement and Design	
MATH 739	Applied Regression Analysis	
MATH 740	Design of Experiments I	
MATH 741	Survival Analysis	
MATH 743	Time Series Analysis	
MATH 744	Design of Experiments II	
MATH 755	Probability with Applications	
MATH 756	Principles of Statistical Inference	
Total Credits		**20**

[1] This requirement may be satisfied by MATH 525 Linearity I.

Mechanical Engineering

Mission

In support of the University and college missions, the Department of Mechanical Engineering is dedicated to educating the highest quality engineering professionals and leaders. Graduates will be prepared to creatively solve engineering problems through the use of analysis, computation, and experimentation. Students completing the program should be well-informed citizens who have the ability to grow intellectually and are able to solve new, challenging problems with self-confidence. It is the department's intent to maintain a general and flexible curriculum that prepares students for both industrial practice and graduate education.

Educational Objectives

The objective of the UNH Mechanical Engineering Program is to produce graduates who are ethical professionals and good citizens. As they progress in the first several years following graduation, they are expected to:

1. Use their engineering education and communication skills for success in:
   a. Technical careers in industry, academia, government, or other organizations;
   b. Graduate school in engineering or physical sciences;
   c. Nontechnical careers or education in areas such as law, medicine, business, public policy, secondary education, service industries, etc.;
   d. Careers involving management or entrepreneurship.
2. Exercise lifelong learning to:
   a. Pursue professional development opportunities in their disciplines;

b. Develop new knowledge and skills;
c. Pursue new areas of expertise or careers.

3. Use their engineering background to:
   a. Solve technical problems for societal benefit;
   b. Develop new knowledge and products that will promote sustainable economic and environmental developments to improve the quality of life;
   c. Promote the practice of engineering.

Mechanical engineering is a challenging profession and has two major emphases. The first is the general area of mechanical design, which involves all types of mechanical motion and the forces and energy that drive it. The other emphasis deals with energy generation and conversion and is grounded in the principles of the thermal and fluid sciences. Other subject areas, which support both emphases and are frequently part of designs and products, are the materials sciences, manufacturing, and control systems. All of these areas are included in the education and training of mechanical engineers. Ocean engineering is another focus area in our department which emphasizes solving engineering problems associated with the sustainable utilization of ocean resources and the scientific exploration and study of the ocean environment. Mechanical engineering requires significant study in mathematics, engineering computing, and basic sciences such as chemistry and physics, as well as basic engineering courses, before reaching the more specialized courses. Additional information can be found at the mechanical engineering website.

https://ceps.unh.edu/mechanical-engineering

Programs

- Mechanical Engineering Major (B.S.) (p. 153)
- Mechanical Engineering Minor (p. 156)

Faculty

Mechanical Engineering Department Faculty

Mechanical Engineering Major (B.S.)

https://www.unh.edu/program/bachelor-science/mechanical-engineering

Description

The B.S.M.E. curriculum provides students with a solid engineering core and prepares students for professional engineering careers or for graduate study. The department has course sequences in mechanics, thermal/fluid sciences, and systems and controls. Modern experimental methods are taught in a course sequences starting in the junior year. The two-semester senior design project requires students to utilize the skills they have learned in their courses and function in an engineering team. The five technical electives required in the program give the students the opportunity to focus on advanced technical areas of their choice.

With their advisers' assistance, students should plan a program based on the following distribution of courses that totals not less than 128 credits. Note: mechanical engineering graduates typically exceed this requirement depending on what elective courses they select in the curriculum. Within the constraints of satisfying all the requirements and having all the necessary prerequisites, schedules may vary because of scheduling needs or student preference. Curriculum flexibility allows students to pursue a co-op experience or a minor, if interested which will potentially delay graduation. Some mechanical engineering elective courses may not be offered every year.

The Mechanical Engineering (B Sci in Mechanical Engineering) program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Program Criteria for Mechanical and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Grade-Point Average Requirements

In order to graduate with a mechanical engineering B.S. degree, students must have at least a 2.0 grade-point average in all engineering and science courses, including required technical electives, normally taken as department requirements after the start of the junior year as defined in the degree plan below.

Predictor courses: To enter the sophomore year, students must achieve a greater than (but not equal to) 2.00 GPA in PHYS 407 General Physics I and MATH 426 Calculus II with no grade below a C.

To enter the junior year, students must achieve a minimum GPA of 2.00 in ME 525 Statics, ME 526 Mechanics of Materials, and ME 503 Thermodynamics with only one C- grade allowed and no grades below C-.

Students are allowed two repeats of these predictor courses to achieve the predictor rule requirements before being removed from the Program. This can be a single class repeated twice or two classes repeated once. Students are also removed from the program if if they obtain a semester GPA below 1.5 three times. Students may petition to be reinstated after one year out of the program.

Code	Title	Credits
Required Courses		
CHEM 405	Chemical Principles for Engineers	4
or CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	
ECON 402	Principles of Economics (Micro)	4
or NR 411	Environmental and Resource Economics Perspectives	
ECE 537	Introduction to Electrical Engineering	4
ENGL 401	First-Year Writing	4
IAM 550	Introduction to Engineering Computing	4
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	

MATH 527	Differential Equations with Linear Algebra	4
or MATH 525	Linearity I	
MATH 528	Multidimensional Calculus	4
or MATH 526	Linearity II	
ME 441	Introduction to Engineering Design and Solid Modeling	4
or ME 477	Introduction to Solid Modeling	
ME 503	Thermodynamics	3
ME 525	Statics	4
ME 526	Mechanics of Materials	3
ME 561	Introduction to Materials Science	4
ME 603	Heat Transfer	3
ME 608	Fluid Dynamics	3
ME 627	Dynamics	3
ME 643	Machine Design	3
ME 646	Experimental Measurement and Data Analysis	4
ME 670	Systems Modeling, Simulation, and Control	4
ME 705	Thermal System Analysis and Design	4
ME 747	Experimental Measurement and Modeling of Complex Systems	4
ME 755	Senior Design Project I	2
or TECH 797	Undergraduate Ocean Research Project	
ME 756	Senior Design Project II	2
or TECH 797	Undergraduate Ocean Research Project	
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	

Technical Elective Requirements

Students must complete five (5) technical elective courses.

- One (1) course must be an analytical technical elective selected from the approved list below.
- One (1) course must be a computational/experimental technical elective selected from the approved list below.
- Of the three (3) remaining technical electives: a minimum of two (2) courses must be taken in Mechanical Engineering, Ocean Engineering, or Integrated Applied Mathematics, or any combination therof. These courses must be at least three credits and at the 600- or 700-level. At most one technical elective may be selected from other CEPS courses at the 600- or 700-level. See list below.
  - *Students should consult with their academic advisor before selecting technical electives outside of mechanical/ocean engineering. With departmental approval, the two technical electives outside of mechanical/ocean engineering can be used for studying a focused area/minor, with the restrictions that only one course can be at the 400- or 500-level and the focused area/minor must be in a bachelor's degree program.*

Code	Title	Credits
Approved Analytical Technical Electives		
Select one course from the following:		
ME 707	Analytical Fluid Dynamics	4
ME 712	Waves in Fluids	3
ME 727	Advanced Mechanics of Solids	4

Code	Title	Credits
Approved Computational/Experimental Technical Electives		
Select one course from the following:		
ME 709	Computational Fluid Dynamics	3
ME 710	Experimental Fluid Dynamics	4
ME 772	Control Systems	4
ME 786	Introduction to Finite Element Analysis	4

Code	Title	Credits
Other CEPS Courses		
At most one technical elective may be selected from other 600- or 700-level courses within the College of Engineering and Physical Sciences (CEPS), or from the following courses: [1]		
CS 410C	Introduction to Scientific Programming/C	4
CS 410P	Introduction to Scientific Programming/Python	4
ESCI 501	Introduction to Oceanography	4
ECE 543	Introduction to Digital Systems	4
TECH 750	Intellectual Asset Management for Engineers and Scientists	4
TECH 780	Intellectual Property Law for Engineers & Scientists	3

[1] Or another course approved through an Undergraduate Petition for Variance in Academic Policy. Courses that cover nearly identical material to core mechanical engineering courses, but in another CEPS department, will not be accepted as technical electives, e.g. CHBE 601, CHBE 602, CHBE 604, CEE 635, CEE 650, ECE 633.

Discovery Program Requirements

Students must satisfy the University's Discovery Program requirements. The following features are unique to students in the Mechanical Engineering Program:

As is the case across the University, all students are required to take an Inquiry course or an Inquiry Attributes course during their first two years. This can be satisfied with ME 441 Introduction to Engineering Design and Solid Modeling. Students who are exempt from ME 441 Introduction to Engineering Design and Solid Modeling due to prior engineering design and computer-aided design (CAD) experience must select an Inquiry 444 course or a course with an Inquiry Attribute and enroll in ME 477 Introduction to Solid Modeling. The Discovery Environment, Technology, and Society category requirement is met upon receiving a B.S. degree in mechanical engineering. The Discovery Social Science category must be satisfied with either ECON 402 Principles of Economics (Micro) or NR 411 Environmental and Resource Economics Perspectives. The Discovery senior capstone experience is satisfied with either ME 755 Senior Design Project I and ME 756 Senior Design Project II or TECH 797 Undergraduate Ocean Research Project.

Transfer Policy for UNH Students into the Department of Mechanical Engineering

CEPS Students: To transfer into the freshman or sophomore year, students must earn a combined GPA greater than (but not equal to) 2.00 in PHYS 407 General Physics I and MATH 426 Calculus II with no grade below a C in these two courses.

If students are enrolled in ME 525 Statics (or CEE 500 Statics for Civil Engineers), ME 526 Mechanics of Materials (or CEE 501 Strength of Materials), or ME 503 Thermodynamics, they must earn a combined GPA of 2.00 with no grade below a C- in two of these courses with only one C- grade allowed to transfer into Mechanical Engineering. Note: A combined GPA greater than (but not equal to) 2.00 in PHYS 407 General Physics I and MATH 426 Calculus II with no grade below a C is also required.

Non-CEPS Students: To transfer into the Department of Mechanical Engineering from another college at UNH, students have to satisfy the CEPS college transfer policy as well as the Department of Mechanical Engineering transfer policies listed above according to their status.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ME 441 or ME 477	Introduction to Engineering Design and Solid Modeling [1] or Introduction to Solid Modeling	4
CHEM 405 or CHEM 403 ***and*** CHEM 404	Chemical Principles for Engineers [2] or General Chemistry I ***and*** General Chemistry II	4
MATH 425	Calculus I [3]	4
Discovery Program Elective		4
	Credits	**16**
Spring		
ENGL 401	First-Year Writing [4]	4
MATH 426	Calculus II	4
PHYS 407	General Physics I [2]	4
Discovery Program Elective		4
	Credits	**16**
Second Year		
Fall		
ME 525	Statics	4
IAM 550	Introduction to Engineering Computing	4
MATH 528 or MATH 525	Multidimensional Calculus [5] or Linearity I	4
PHYS 408	General Physics II	4
Discovery Program Elective		4
	Credits	**20**
Spring		
ME 503	Thermodynamics	3
ME 526	Mechanics of Materials	3
ME 561	Introduction to Materials Science	4
MATH 527 or MATH 526	Differential Equations with Linear Algebra [5] or Linearity II	4
	Credits	**14**
Third Year		
Fall		
ME 608	Fluid Dynamics	3
ME 627	Dynamics	3
ME 705	Thermal System Analysis and Design	4
ECE 537	Introduction to Electrical Engineering	4
Discovery Program Elective		4
	Credits	**18**
Spring		
ME 603	Heat Transfer	3
ME 643	Machine Design	3
ME 646	Experimental Measurement and Data Analysis	4
ME 670	Systems Modeling, Simulation, and Control	4
	Credits	**14**
Fourth Year		
Fall		
ME 755 or TECH 797	Senior Design Project I [6] or Undergraduate Ocean Research Project	2
ME 747	Experimental Measurement and Modeling of Complex Systems	4
Technical Elective		3-4
Technical Elective		3-4
Discovery Program Elective		4
	Credits	**16-18**
Spring		
ME 756 or TECH 797	Senior Design Project II [6] or Undergraduate Ocean Research Project	2
Technical Elective		3-4
Technical Elective		3-4
Technical Elective		3-4
Discovery Program Elective		4
	Credits	**15-18**
	Total Credits	**129-134**

1. ME 441 Introduction to Engineering Design and Solid Modeling satisfies the Discovery Inquiry requirement. Note: ME 477 does not satisfy the Discovery Inquiry requirement. An alternative Discovery Program Inquiry course or Inquiry Attributes course is required. Permission is required to take ME 477 in place of ME 441.
2. CHEM 405 Chemical Principles for Engineers or CHEM 403 General Chemistry I and CHEM 404 General Chemistry II, or PHYS 407 General Physics I satisfies the Discovery Physical Science (with lab) category.
3. MATH 425 Calculus I satisfies the Discovery Foundation Quantitative Reasoning category.
4. ENGL 401 First-Year Writing satisfies the Discovery Foundation Writing Skills category.
5. MATH 525 Linearity I and MATH 526 Linearity II also counts as a 600-level technical elective course typically completed in the senior year of the program. Permission is required to take Linearity I and II.
6. ME 755, ME 756 and TECH 797 satisfy the Discovery Senior Capstone Experience category.

Student Learning Outcomes

Program Learning Outcomes

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must

consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Mechanical Engineering Minor

https://www.unh.edu/program/minor/mechanical-engineering

Description

The minor, administered by the Department of Mechanical Engineering and offers a broad introduction to mechanical engineering.

Interested students should contact the Mechanical Engineering Chair, Dr. Christopher White.

Requirements

Academic policies related to Minors.

Credit toward the minor will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the minor.

Required Courses

Students must complete a minimum of six courses as follows:

Code	Title	Credits
ME 441	Introduction to Engineering Design and Solid Modeling	4
ME 503	Thermodynamics	3
ME 525	Statics	4
ME 526	Mechanics of Materials	3
ME 627	Dynamics	3
ME 608	Fluid Dynamics	3
Total Credits		**20**

Electrical and Computer Engineering majors should take the following courses:

Code	Title	Credits
ME 477	Introduction to Solid Modeling	1
ECE 633	Signals and Systems I [1]	3
ECE 634	Signals and Systems II [1]	3
ME 503	Thermodynamics	3
ME 525	Statics	4
ME 561	Introduction to Materials Science	4
Select one of the following: [2]		
ME 526	Mechanics of Materials	3
ME 608	Fluid Dynamics	3
ME 627	Dynamics	3

[1] ECE Major Required Courses.

[2] The total number of credits required is 21.

Physics majors should take the following courses:

Code	Title	Credits
PHYS 508	Thermodynamics and Statistical Mechanics [1]	4
PHYS 615	Classical Mechanics and Mathematical Physics I [1]	4
ME 477	Introduction to Solid Modeling	1
ME 526	Mechanics of Materials	3
ME 608	Fluid Dynamics	3
Select one of the following: [2]		
ME 643	Machine Design	3
ME 670	Systems Modeling, Simulation, and Control	4
ME 705	Thermal System Analysis and Design	4

[1] Physics Major Required Courses.

[2] The total number of credits to complete the Physics Minor will be either 18 or 19 depending on what course is selected.

Ocean Engineering

Mission

The undergraduate program in ocean engineering emphasizes ocean engineering fundamentals while offering interdisciplinary opportunities for focused study in civil, electrical, environmental, or mechanical engineering, as well as marine sciences.

Program Educational Objectives

The ocean engineering program seeks to provide an environment that enables students to pursue their goals in an innovative, rigorous, and challenging program with a diversity of offerings. The program has the following major educational objectives, with the expectation that alumni will have successful careers in the many diverse areas of the ocean engineering profession. Within a few years of obtaining a bachelor's degree in ocean engineering, we expect our graduates to have the following attributes:

Depth. To be effective in applying ocean engineering principles in engineering practice or for advanced study in ocean engineering.

Breadth. To have a productive career in the many diverse fields of ocean engineering such as coastal engineering, ocean acoustics, offshore structures, and marine renewable energy, or in the pursuit of graduate education in disciplines that include marine science, engineering, medicine, law, or business.

Professionalism. To function effectively in the complex modern work environment with the ability to assume professional leadership roles.

https://ceps.unh.edu/ocean-engineering/academics

Programs

- Ocean Engineering Major (B.S.) (p. 156)
- Ocean Engineering Minor (p. 159)

Faculty

Ocean Engineering Department Faculty

Ocean Engineering Major (B.S.)

https://www.unh.edu/program/bachelor-science/ocean-engineering

Description

Ocean engineering is a field of study that seeks to solve engineering problems associated with the ocean, including those problems associated with the sustainable utilization of ocean resources and the scientific exploration and study of the ocean environment. Ocean engineering is an interdisciplinary field with roots in mechanical, electrical, civil, and environmental engineering, with strong ties to physical, chemical, biological, and geological oceanography. Students of ocean engineering are best served when they are formally trained inside a framework that fuses the expertise of these often-disparate fields.

The BSOE curriculum provides students with a solid engineering core and prepares students for professional engineering careers or for graduate study. The BSOE starts with foundational classes in math, physics, chemistry, and engineering computing, along with introductions to ocean engineering through seminars and oceanography coursework. Students develop their engineering acumen through coursework and laboratory studies that are focused on analysis, experimentation, and design. Students proceed to increasingly advanced coursework in ocean instrumentation, waves and tides, the design of ocean structures, coastal engineering, ocean measurements, and ocean acoustics. Opportunities exist for at least four technical electives, which help students gain further competence in an area of their choice. Students finish their curriculum with a two-semester senior capstone design project. Elective courses in the arts, humanities, and the social sciences are included to provide a well-rounded education.

Students work with an advisor to plan a program that is based on the required coursework for the degree. Some ocean engineering elective courses may not be offered every year.

The Ocean Engineering (B Sci in Ocean Engineering) program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org, under the General Criteria and the Program Criteria for Naval Architecture, Marine Engineering, Ocean Engineering and Similarly Named Engineering Programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Technical Electives
The Ocean Engineering (OE) program curriculum requires four Technical Electives that are CEPS 600-level or higher courses, and include exceptions for CS 410C Introduction to Scientific Programming/C and CS 410P Introduction to Scientific Programming/Python. The math sequence MATH 525 Linearity I and MATH 526 Linearity II may be substituted for MATH 527 Differential Equations with Linear Algebra and MATH 528 Multidimensional Calculus, and in addition will also count as one Technical Elective. Acceptable Technical Electives from Colleges outside of CEPS include MARI 705 Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy, MARI 730 Research Diving Technologies, MARI 735 Advanced SCUBA, MEFB 702 Sustainable Marine Fisheries, MEFB 755 Biological Oceanography, ZOOL 610 Principles of Aquaculture, TECH 750 Intellectual Asset Management for Engineers and Scientists, and TECH 780 Intellectual Property Law for Engineers & Scientists. Common Technical Electives include sequences that have been identified that will provide students more in-depth opportunities in one of the Ocean Engineering sub-areas. One Technical Elective must one of the following program-approved statistics courses: ESCI 764 Spectral Analysis of Geophysical Time Series Data, MATH 644 Statistics for Engineers and Scientists, or ESCI 701 Quantitative Methods in Earth Sciences.

Discovery Program
Students must satisfy the University's Discovery Program requirements. The following features are unique to students in the Ocean Engineering program: students are required to take an Inquiry course or an Inquiry Attribute course during their first two years. This is satisfied with ESCI 501 Introduction to Oceanography. The Discovery Environment, Technology, and Society (ETS) category requirement is met upon receiving a B.S. degree in ocean engineering. The Discovery Social Science category must be satisfied with either ECON 402 Principles of Economics (Micro) or NR 411 Environmental and Resource Economics Perspectives. The Discovery senior capstone experience is satisfied with TECH 797 Undergraduate Ocean Research Project.

Grade-Point Average
In order to graduate with an Ocean Engineering B.S. degree, students must have at least a 2.0 grade-point average in all engineering and science courses, including required technical electives, normally taken as department requirements after the start of the junior year as defined in the degree plan below.

Predictor courses: To continue beyond the first semester of the junior year, students must achieve at least a 2.00 GPA in the following courses: PHYS 407 General Physics I, MATH 426 Calculus II, ME 525 Statics or CEE 500 Statics for Civil Engineers, and ME 526 Mechanics of Materials or CEE 501 Strength of Materials, with only one grade below C- allowed in the courses.

Students are removed from the program if they obtain a semester GPA <1.5 three times. Students may petition to be reinstated after one year out of the program.

Transfer Policy for UNH Students

CEPS Students: To transfer into the freshman or sophomore year, students must earn a combined GPA greater than (but not equal to) 2.00 in PHYS 407 General Physics I and MATH 426 Calculus II with no grade below a C- in these two courses.

If students are enrolled in ME 525 Statics (or CEE 500 Statics for Civil Engineers), or ME 526 Mechanics of Materials (or CEE 501 Strength of Materials), they must earn a combined GPA of at least 2.00 with no grade below a C- in order to be allowed to transfer into the program.

Non-CEPS Students: To transfer into the Ocean Engineering B.S. from another college at UNH, students have to satisfy the CEPS college

transfer policy as well as the Ocean Engineering program transfer policies listed above according to status.

Code	Title	Credits
Required Courses		
CHEM 405	Chemical Principles for Engineers	4
or CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	
ECON 402	Principles of Economics (Micro)	4
or NR 411	Environmental and Resource Economics Perspectives	
ECE 537	Introduction to Electrical Engineering	4
ESCI 501	Introduction to Oceanography	4
ESCI 720	Ocean Measurements Lab	4
IAM 550	Introduction to Engineering Computing	4
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 525 & MATH 526	Linearity I and Linearity II	12
or MATH 527 & MATH 528	Differential Equations with Linear Algebra and Multidimensional Calculus	
ME 503	Thermodynamics	3
ME 525	Statics	4
or CEE 500	Statics for Civil Engineers	
ME 526	Mechanics of Materials	3
or CEE 501	Strength of Materials	
ME 608	Fluid Dynamics	3
or CEE 650	Fluid Mechanics	
ME 627	Dynamics	3
OE 400	Ocean Engineering Seminar	1
OE 401	Ocean Engineering Seminar	1
OE 490	Introduction to Ocean Engineering	4
OE 610	Ocean Instrumentation Lab	4
OE 754	Ocean Waves and Tides	4
OE 757	Coastal Engineering and Processes	3
OE 758	Design of Ocean Structures	3
OE 765	Underwater Acoustics	3
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
TECH 797	Undergraduate Ocean Research Project	2
Technical Electives		
Technical Electives: 600-level or higher, choose four electives; at least one of the four courses must be 4 credits.		

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MATH 425	Calculus I [1]	4
PHYS 407	General Physics I [2]	4
OE 400	Ocean Engineering Seminar	1
Discovery Program Elective		4
Discovery Program Elective		4
	Credits	**17**
Spring		
ENGL 401	First-Year Writing [3]	4
MATH 426	Calculus II	4
OE 490	Introduction to Ocean Engineering	4
PHYS 408	General Physics II	4
Discovery Program Elective		4
	Credits	**20**
Second Year		
Fall		
CHEM 405 or CHEM 403 ***and*** CHEM 404	Chemical Principles for Engineers [2] or General Chemistry I ***and*** General Chemistry II	4
ESCI 501	Introduction to Oceanography (satsifies the Discovery Inquiry requirement) [4]	4
MATH 528 or MATH 525	Multidimensional Calculus [5] or Linearity I	4
ME 525	Statics	4
	Credits	**16**
Spring		
IAM 550	Introduction to Engineering Computing	4
MATH 527 or MATH 526	Differential Equations with Linear Algebra [5] or Linearity II	4
ME 503	Thermodynamics	3
ME 526 or CEE 501	Mechanics of Materials or Strength of Materials	3
OE 401	Ocean Engineering Seminar	1
	Credits	**15**
Third Year		
Fall		
ECE 537	Introduction to Electrical Engineering	4
ME 608	Fluid Dynamics	3
ME 627	Dynamics	3
OE 754	Ocean Waves and Tides	4
	Credits	**14**
Spring		
OE 610	Ocean Instrumentation Lab	4
OE 757	Coastal Engineering and Processes	3
OE 758	Design of Ocean Structures	3
Technical Elective [6]		4
	Credits	**14**
Fourth Year		
Fall		
ESCI 720	Ocean Measurements Lab	4
OE 765	Underwater Acoustics	3
TECH 797	Undergraduate Ocean Research Project	2
Discovery Program Elective		4
Technical Elective [6]		4
	Credits	**17**
Spring		
TECH 797	Undergraduate Ocean Research Project	2
Technical Elective [6]		3-4
Technical Elective [6]		3-4
Discovery Program Elective		4

Discovery Program Elective	4
Credits	**16-18**
Total Credits	**129-131**

1 MATH 425 Calculus I satisfies the Discovery Foundation Quantitative Reasoning category.
2 PHYS 407 General Physics I or CHEM 405 Chemical Principles for Engineers or CHEM 403 General Chemistry I and CHEM 404 General Chemistry II satisfies the Discovery Physical Science (with lab) category.
3 ENGL 401 First-Year Writing satisfies the Discovery Foundation Writing Skills category.
4 ESCI 501 Introduction to Oceanography satisfies the Discovery Inquiry requirement.
5 MATH 525 Linearity I and MATH 526 Linearity II may be substituted for MATH 527 Differential Equations with Linear Algebra and MATH 528 Multidimensional Calculus. The MATH 525 and MATH 526 sequence will also count as one Technical Elective.
6 Total technical elective credits must be at 14 credits or higher to meet the UNH required total of 128 credits for graduation

Student Learning Outcomes

Program Learning Outcomes

Upon completion of the B.S. in Ocean Engineering degree program, students will have the:

- ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science and math. Knowledge of fluid mechanics and hydrostatics with depth in at least one. An ability to apply solid mechanics and dynamics through multivariate calculus and differential equations. Knowledge of oceanography, water waves, and underwater acoustics. Ability to apply probability and applied statistics.
- ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety and welfare, as well as global, cultural, social, environmental and economic factors.
- ability to communicate effectively with a range of audiences.
- ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments which must consider the impact of engineering solutions in global, economic, environmental and societal contexts.
- ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Ocean Engineering Minor

https://www.unh.edu/program/minor/ocean-engineering

Description

The ocean engineering minor allows undergraduate engineering students to acquire a nucleus of knowledge about engineering pertaining to the ocean and the coastal zone.

Students wishing to take the ocean engineering minor should indicate their interest to the ocean engineering minor advisor, Tom Lippmann (t.lippmann@unh.edu).

Requirements

Academic policies related to Minors.

Credit toward the minor will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the minor.

Code	Title	Credits
Required Course		
OE 490	Introduction to Ocean Engineering	4
Electives		
Select four courses from the following:		
ESCI 501	Introduction to Oceanography	4
ESCI 720	Ocean Measurements Lab	4
ESCI 752	Chemical Oceanography	3
ESCI 758	Introductory Physical Oceanography	3
ESCI 759	Geological Oceanography	4
OE 717	Marine Robotics and Applications	3
OE 753	Ocean Hydrodynamics	3
OE 754	Ocean Waves and Tides	4
OE 757	Coastal Engineering and Processes	3
OE 758	Design of Ocean Structures	3
OE 765	Underwater Acoustics	3
OE 770	Geodesy for Ocean Mapping	3
OE 771	Positioning for Ocean Mapping	4
OE 795	Special Topics	2-4
CEE 722	Introduction to Marine Pollution and Control	4
TECH 797	Undergraduate Ocean Research Project	2

Students typically take ESCI 501 Introduction to Oceanography, TECH 797 Undergraduate Ocean Research Project, and OE 490 Introduction to Ocean Engineering plus two additional engineering courses from the above list to complete the minor.

Physics and Astronomy

Physics is concerned with the properties of matter and the laws that describe its behavior. As a fundamental science, its discoveries and laws are basic to understanding in nearly all areas of science and technology. Advances in such diverse fields as medical instrumentation, solid state electronics, and space research have relied heavily on the application of basic physical laws and principles.

Students interested in the study of physics at the University of New Hampshire will find a strong interaction between research and academic programs. Undergraduates frequently participate in research studies ranging from nuclear scattering experiments at major particle accelerators to astrophysical studies of the solar system using space probes. These experiences have proven beneficial to engineering and physics students alike. The department is located in DeMeritt Hall (completed in 2008) and Morse Hall. Both buildings are equipped with state-of-the-art research facilities and laboratories. DeMeritt Hall also

houses the physics library, classrooms, and a number of open and comfortable meeting areas, which provide an inviting atmosphere for study, interaction, and collaboration.

The suggested programs that follow are indicative of the flexibility available to students, whether they are preparing for graduate work in physics or astronomy, industrial opportunities, governmental research, secondary-level teaching, or a general education that might utilize the fundamental knowledge of physics.

Several undergraduate degree programs are offered through the department of physics. The B.S. degree is designed for students who wish to work as professional physicists or engineers. The B.A. degree is designed for students who want a strong background in physics but also want a broad liberal arts education. The department also offers a B.S. in engineering physics, which offers a deeper understanding of the physical principles needed to support careers in engineering. The BSEP program offers two tracks for students; aerospace and engineering research. Minors for astronomy and physics are also offered by the department.

Interested students are encouraged to contact the department for further information. More detailed information is also on the physics department website.

https://ceps.unh.edu/physics-astronomy

Programs

- Engineering Physics Major (B.S.) (p. 160)
- Physics Major (B.A.) (p. 163)
- Physics Major (B.S.) (p. 164)
- Astronomy Minor (p. 166)
- Physics Minor (p. 166)

Faculty

Physics and Astronomy Department Faculty

Engineering Physics Major (B.S.)

https://www.unh.edu/program/bachelor-science/engineering-physics

Description

The goal of the UNH BSEP program is to produce broadly-trained engineers who can provide solutions to today's challenging problems in support of a technologically evolving society. The core of the program is based on interdisciplinary training, complemented with a deeper understanding of the physical principles needed to support careers in engineering, engineering research or, perhaps, further training in systems engineering. The program balances depth and breadth in skill development; flexibility and functionality are what drive the program in the sense that 1) the particular focus is based on the student's interests, and 2) the breadth of the course selection is guided by the post-graduation goals of the student (e.g., employment versus graduate school).

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A student must have a minimum grade of C in each 400- or 500-level courses that are part of the core requirements and an overall grade-point average of 2.33 in these courses in order to continue in the program.

Code	Title	Credits
Core Requirements (all tracks)		
CHEM 403	General Chemistry I	4
or CHEM 405	Chemical Principles for Engineers	
IAM 550	Introduction to Engineering Computing	4
or CS 410C	Introduction to Scientific Programming/C	
or CS 410P	Introduction to Scientific Programming/Python	
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
MATH 527 & MATH 528	Differential Equations with Linear Algebra and Multidimensional Calculus	8-12
or MATH 525 & MATH 526	Linearity I and Linearity II	
PHYS 400	Physics Seminar I	1
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
PHYS 505	General Physics III	3
PHYS 506	General Physics III Laboratory	1
PHYS 508	Thermodynamics and Statistical Mechanics	4
PHYS 615	Classical Mechanics and Mathematical Physics I	4
PHYS 616	Classical Mechanics and Mathematical Physics II	4
PHYS 703	Electricity and Magnetism I	4
Capstone		*4*
PHYS 797	Senior Design Project	4
Additional courses for Aerospace Track		
ECE 541	Electric Circuits	4
ECE 548	Electronic Design I	4
ME 608	Fluid Dynamics	3
ME 743	Satellite Systems, Dynamics, and Control	3-4
or PHYS 712	Space Plasma Physics	
Aerospace track electives in major:		
Select five courses from the following:		
CS 417	From Programs to Computer Science	4
CS 419	Computer Science for Engineers and Scientists	4
CS 501	Professional Ethics and Communication in Technology-related Fields	4
or PHIL 424	The Future of Humanity: Science, Technology, and Society	
or PHIL 447	A.I., Robots, and People	
CS 659	Introduction to the Theory of Computation	4
ECE 543	Introduction to Digital Systems	4

ECE 562	Computer Organization	4
ECE 583	Designing with Programmable Logic	6
ECE 633	Signals and Systems I	3
ECE 634	Signals and Systems II	3
ECE 649	Embedded Microcomputer Based Design	6
ECE 652	Electronic Design II	6
MATH 539	Introduction to Statistical Analysis	4
or MATH 644	Statistics for Engineers and Scientists	
MATH 645	Linear Algebra for Applications	4
MATH 647	Complex Analysis for Applications	4
or MATH 788	Complex Analysis	
ME 441	Introduction to Engineering Design and Solid Modeling	4
ME 603	Heat Transfer	3
ME 646	Experimental Measurement and Data Analysis	4
ME 670	Systems Modeling, Simulation, and Control	4
ME 705	Thermal System Analysis and Design	4
ME 706	Renewable Energy: Physical and Engineering Principles	3
ME 707	Analytical Fluid Dynamics	4
ME 712	Waves in Fluids	3
ME 743	Satellite Systems, Dynamics, and Control	3
ME 747	Experimental Measurement and Modeling of Complex Systems	4
ME 786	Introduction to Finite Element Analysis	4
PHYS 605	Experimental Physics I	5
PHYS 701	Quantum Mechanics I: Foundations, Quantum Information, and Quantum Computing	4
PHYS 702	Quantum Mechanics II: Applications to Continuous Systems	4
PHYS 704	Electricity and Magnetism II	4
PHYS 705	Experimental Physics II	4
PHYS 708	Optics	4
PHYS 710	Astrophysics I	4
PHYS 711	Astrophysics II	4
PHYS 712	Space Plasma Physics	4
PHYS 718	Quantum Materials	4
PHYS 720	Nuclear Physics	4
PHYS 764	General Relativity and Cosmology	4
Additional Courses for the Engineering Research track		
ECE 541	Electric Circuits	4
ECE 543	Introduction to Digital Systems	4
ECE 548	Electronic Design I	4
PHYS 704	Electricity and Magnetism II	4
or PHYS 708	Optics	
Engineering Research track electives in major:		
Select five courses from the following:		
CS 417	From Programs to Computer Science	0
CS 419	Computer Science for Engineers and Scientists	4
CS 501	Professional Ethics and Communication in Technology-related Fields	4
or PHIL 424	The Future of Humanity: Science, Technology, and Society	
or PHIL 447	A.I., Robots, and People	
CS 750	Machine Learning	4
ECE 562	Computer Organization	4
ECE 583	Designing with Programmable Logic	6
ECE 633	Signals and Systems I	3
ECE 634	Signals and Systems II	3
ECE 647	Random Processes and Signals in Engineering	3
ECE 649	Embedded Microcomputer Based Design	6
ECE 652	Electronic Design II	6
ECE 653	Electronic Design III	6
MATH 539	Introduction to Statistical Analysis	4
or MATH 644	Statistics for Engineers and Scientists	
MATH 645	Linear Algebra for Applications	4
MATH 647	Complex Analysis for Applications	4
or MATH 788	Complex Analysis	
ME 441	Introduction to Engineering Design and Solid Modeling	4
ME 561	Introduction to Materials Science	4
ME 608	Fluid Dynamics	4
ME 670	Systems Modeling, Simulation, and Control	4
ME 706	Renewable Energy: Physical and Engineering Principles	3
ME 712	Waves in Fluids	3
ME 743	Satellite Systems, Dynamics, and Control	3
PHYS 605	Experimental Physics I	5
PHYS 701	Quantum Mechanics I: Foundations, Quantum Information, and Quantum Computing	4
PHYS 702	Quantum Mechanics II: Applications to Continuous Systems	4
PHYS 704	Electricity and Magnetism II	4
PHYS 705	Experimental Physics II	4
PHYS 708	Optics	4
PHYS 710	Astrophysics I	4
PHYS 711	Astrophysics II	4
PHYS 718	Quantum Materials	4
PHYS 720	Nuclear Physics	4
PHYS 764	General Relativity and Cosmology	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

Students are recommended (but not required) to take MATH 425H Honors/Calculus I and PHYS 407H Honors/General Physics I in their first semester and MATH 426H Honors/Calculus II and PHYS 408H Honors/General Physics II in their second semester, if eligible to take calculus first semester. Non-Honors versions of these courses will also satisfy the requirements for either Engineering Physics option.

Aerospace Track

First Year

Fall		**Credits**
PHYS 407H	Honors/General Physics I	4
MATH 425H	Honors/Calculus I	4
PHYS 400	Physics Seminar I	1
ENGL 401	First-Year Writing	4
Discovery Course		4
	Credits	**17**
Spring		
PHYS 408H	Honors/General Physics II	4
MATH 426H	Honors/Calculus II	4
CHEM 405	Chemical Principles for Engineers	4
IAM 550	Introduction to Engineering Computing	4
	Credits	**16**

Second Year

Fall		
PHYS 505	General Physics III	3
PHYS 506	General Physics III Laboratory	1
PHYS 508	Thermodynamics and Statistical Mechanics	4
MATH 528	Multidimensional Calculus	4
Discovery Course		4
	Credits	**16**
Spring		
PHYS 615	Classical Mechanics and Mathematical Physics I	4
MATH 527	Differential Equations with Linear Algebra	4
Elective in Major		4

Discovery Course		4
	Credits	**16**
Third Year		
Fall		
PHYS 616	Classical Mechanics and Mathematical Physics II	4
ME 608	Fluid Dynamics	3
ECE 541	Electric Circuits	4
Discovery Course		4
	Credits	**15**
Spring		
PHYS 703	Electricity and Magnetism I	4
ECE 548	Electronic Design I	4
Elective in Major		3-4
Discovery Course		4
	Credits	**15-16**
Fourth Year		
Fall		
PHYS 797	Senior Design Project	2
Elective in Major		3-4
Elective in Major		3-4
Discovery Course		4
Free Elective		4
	Credits	**16-18**
Spring		
PHYS 797	Senior Design Project	2
ME 743 or PHYS 712	Satellite Systems, Dynamics, and Control or Space Plasma Physics	3-4
Elective in Major		4
Discovery Course		4
Free Elective		4
	Credits	**17-18**
	Total Credits	**128-132**

Engineering Research Track

First Year		
Fall		**Credits**
PHYS 407H	Honors/General Physics I	4
MATH 425H	Honors/Calculus I	4
CHEM 405	Chemical Principles for Engineers	4
PHYS 400	Physics Seminar I	1
Discovery Course		4
	Credits	**17**
Spring		
PHYS 408H	Honors/General Physics II	4
MATH 426H	Honors/Calculus II	4
IAM 550	Introduction to Engineering Computing	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Second Year		
Fall		
PHYS 505	General Physics III	3
PHYS 506	General Physics III Laboratory	1
MATH 528	Multidimensional Calculus	4
ECE 541	Electric Circuits	4
Discovery Course		4
	Credits	**16**
Spring		
PHYS 615	Classical Mechanics and Mathematical Physics I	4
MATH 527	Differential Equations with Linear Algebra	4
ECE 548	Electronic Design I	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
PHYS 508	Thermodynamics and Statistical Mechanics	4
PHYS 616	Classical Mechanics and Mathematical Physics II	4
Elective in Major		3-4
Discovery Course		4
	Credits	**15-16**
Spring		
PHYS 703	Electricity and Magnetism I	4
ECE 543	Introduction to Digital Systems	4
Elective in Major		3-4
Discovery Course		4
	Credits	**15-16**
Fourth Year		
Fall		
PHYS 797	Senior Design Project	2
PHYS 704 or PHYS 708	Electricity and Magnetism II or Optics	4
Elective in Major		3-4
Free Elective		4
Discovery Course		4
	Credits	**17-18**
Spring		
PHYS 797	Senior Design Project	2
Elective in Major		3-4
Elective in Major		3-4
Free Elective		4
Discovery Course		4
	Credits	**16-18**
	Total Credits	**128-133**

Student Learning Outcomes

Program Learning Outcomes

Students are expected to achieve the outcomes below upon graduation.

- Students will master the fundamentals of a broad set of physics subjects (e.g., mechanics, electricity and magnetism, quantum mechanics, thermodynamics, optics).

- Students will have a solid understanding of mathematics (e.g., calculus, differential equations, linear algebra).
- Students will be able to solve physics and engineering problems using computational methods.
- Students will have excellent knowledge of the principles and practice of their chosen engineering disciplines.
- Students will be able to use physical principles to design systems, apparatuses, experiments or models; collect and analyze data; and develop conclusions.
- Students will be able to identify and solve complex engineering and physics problems by applying physical principles and mathematical tools.
- Students will be able to communicate technical content effectively to a range of audiences.

Physics Major (B.A.)

https://www.unh.edu/program/bachelor-arts/physics

Description

This program provides an opportunity for a broad and liberal education, which in some cases may be sufficient for graduate work. This program can also be excellent preparation for middle and high school physics teachers, pre-med and pre-law students, and those wishing to pursue a technical career in industry. Because there are fewer required courses than for a B.S., you have time to pursue other academic interests. A judicious choice of electives may also prepare students for interdisciplinary programs that require proficiency in a specialized area of physics.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
PHYS 400	Physics Seminar I	1
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
CS 410P	Introduction to Scientific Programming/Python	4
PHYS 505 & PHYS 506	General Physics III and General Physics III Laboratory	4
PHYS 508	Thermodynamics and Statistical Mechanics	4
PHYS 601	Computational Physics Recitation I	1
PHYS 602	Computational Physics Recitation II	1
PHYS 605	Experimental Physics I	5
PHYS 615	Classical Mechanics and Mathematical Physics I	4
PHYS 616	Classical Mechanics and Mathematical Physics II	4
PHYS 701	Quantum Mechanics I: Foundations, Quantum Information, and Quantum Computing	4
PHYS 703	Electricity and Magnetism I	4
PHYS 705	Experimental Physics II	4
Capstone		
Select from the following: [2]		2-8
PHYS 795 & PHYS 799	Independent Study and Thesis	
or INCO 790 & PHYS 799	Advanced Research Experience and Thesis	
or PHYS 798	Senior Project	
Mathematics		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
Select one of the following options:		12
Option A:		
MATH 527 & MATH 528	Differential Equations with Linear Algebra and Multidimensional Calculus	
MATH 545	Introduction to Linear Algebra	
or MATH 645	Linear Algebra for Applications	
Option B:		
MATH 525 & MATH 526	Linearity I and Linearity II	
Total Credits		**70-76**

[1] Note that no physics course can satisfy these requirement for a physics major. The rationale behind this is that a course in physics does not broaden the education of a physics major.

[2] A capstone experience is required of all physics majors during their senior year. The Physics Department encourages students to write a senior thesis (PHYS 799 Thesis) for their capstone experience. Other options include independent study research projects (PHYS 795 Independent Study or INCO 590 Student Research Experience) or a special project as part of senior lab (PHYS 705 Experimental Physics II). All capstone experiences must be approved by the undergraduate committee during the student's penultimate semester.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
PHYS 400	Physics Seminar I	1
PHYS 407	General Physics I	4
MATH 425	Calculus I	4
Other Required Courses		8
	Credits	**17**
Spring		
PHYS 408	General Physics II	4
MATH 426	Calculus II	4
ENGL 401	First-Year Writing	4

CS 410P	Introduction to Scientific Programming/ Python	4
	Credits	**16**
Second Year		
Fall		
PHYS 505 & PHYS 506	General Physics III and General Physics III Laboratory	4
MATH 525 or MATH 527	Linearity I or Differential Equations with Linear Algebra	4-6
PHYS 601	Computational Physics Recitation I	1
Other Required Courses		8
	Credits	**17-19**
Spring		
PHYS 615	Classical Mechanics and Mathematical Physics I	4
MATH 526	Linearity II (or MATH 528 and either MATH 645 or MATH 545)	6-8
PHYS 602	Computational Physics Recitation II	1
Other Required Courses		8
	Credits	**19-21**
Third Year		
Fall		
PHYS 616	Classical Mechanics and Mathematical Physics II	4
PHYS 701	Quantum Mechanics I: Foundations, Quantum Information, and Quantum Computing	4
Other Required Courses		8
	Credits	**16**
Spring		
PHYS 703	Electricity and Magnetism I	4
PHYS 605	Experimental Physics I	5
Other Required Courses		8
	Credits	**17**
Fourth Year		
Fall		
PHYS 705	Experimental Physics II	4
PHYS 508	Thermodynamics and Statistical Mechanics	4
Other Required Courses		4
Capstone		4
	Credits	**16**
Spring		
Other Required Courses		12
Capstone		4
	Credits	**16**
	Total Credits	**134-138**

Student Learning Outcomes

Program Learning Outcomes

- Students will master the fundamentals of mechanics, electricity and magnetism, quantum mechanics, and thermodynamics.
- Students will have a solid understanding of calculus and differential equations and be able to use mathematics to solve physics problems.
- Students will be proficient at taking measurements in a physics lab and analyzing measurements to draw valid conclusions.
- Students will be able to integrate competently the knowledge and skills acquired in the major and have adequate preparation to succeed in post-undergraduate studies or a professional career.
- Students develop and execute plans for post-graduation to establish their careers. Student will understand the variety of career paths and opportunities that are open to students who have majored in physics.
- Students will be able to present scientific ideas effectively in both written and oral form.

Physics Major (B.S.)

https://www.unh.edu/program/bachelor-science/physics

Description

The bachelor of science degree in physics prepares students for professional work as physicists, and is the first step toward graduate work in physics. It is also excellent preparation for graduate programs in medicine, law, or engineering, as well as for technical jobs in industry. The required courses are those typically necessary for admission to graduate study in physics or astronomy.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
PHYS 400	Physics Seminar I	1
PHYS 407	General Physics I	4
or PHYS 407H	Honors/General Physics I	
or PHYS 407S	General Physics I Studio	
PHYS 408	General Physics II	4
or PHYS 408H	Honors/General Physics II	
or PHYS 408S	General Physics II Studio	
PHYS 505 & PHYS 506	General Physics III and General Physics III Laboratory	4
PHYS 508	Thermodynamics and Statistical Mechanics	4
PHYS 601	Computational Physics Recitation I	1
PHYS 602	Computational Physics Recitation II	1
PHYS 605	Experimental Physics I	5
PHYS 615	Classical Mechanics and Mathematical Physics I	4

PHYS 616	Classical Mechanics and Mathematical Physics II	4
PHYS 701	Quantum Mechanics I: Foundations, Quantum Information, and Quantum Computing	4
PHYS 702	Quantum Mechanics II: Applications to Continuous Systems	4
PHYS 703	Electricity and Magnetism I	4
PHYS 704	Electricity and Magnetism II	4
PHYS 705	Experimental Physics II	4
Select two electives from the following:		8
PHYS 708	Optics	
PHYS 710	Astrophysics I	
PHYS 712	Space Plasma Physics	
PHYS 718	Quantum Materials	
PHYS 720	Nuclear Physics	
PHYS 764	General Relativity and Cosmology	
MATH 747	Introduction to Nonlinear Dynamics and Chaos	
MATH 753	Introduction to Numerical Methods I	
Chemistry:		
CHEM 403	General Chemistry I	4
or CHEM 405	Chemical Principles for Engineers	
Mathematics:		
MATH 425	Calculus I	4
or MATH 425H	Honors/Calculus I	
MATH 426	Calculus II	4
or MATH 426H	Honors/Calculus II	
Select one of the following options: [2]		12
Option A:		
MATH 525 & MATH 526	Linearity I and Linearity II [2]	
Option B:		
MATH 528	Multidimensional Calculus	
MATH 527	Differential Equations with Linear Algebra	
MATH 545	Introduction to Linear Algebra	
or MATH 645	Linear Algebra for Applications	
Computer Programming:		
CS 410P	Introduction to Scientific Programming/Python	4
Capstone: [3]		**2-8**
Select from the following:		
PHYS 795 & PHYS 799	Independent Study and Thesis	
or INCO 790 & PHYS 799	Advanced Research Experience and Thesis	
or PHYS 798	Senior Project	
Total Credits		**90-96**

1 Note that no physics course can satisfy these requirement for a physics major. The rationale behind this is that a course in physics does not broaden the education of a physics major.

2 The Department generally recommends MATH 645 Linear Algebra for Applications over MATH 545 Introduction to Linear Algebra for physics majors.

3 A capstone experience is required of all physics majors during their senior year. The Physics Department encourages students to write a senior thesis (PHYS 799 Thesis) for their capstone experience. Other options include independent study research projects (PHYS 795 Independent Study or INCO 590 Student Research Experience) or a special project as part of senior lab (PHYS 705 Experimental Physics II). All capstone experiences must be approved by the undergraduate committee during the student's penultimate semester.

By the end of the spring semester of the sophomore year, a student must have a minimum grade of C in each 400- or 500-level course specifically required for the B.S. degree and an overall grade-point average of at least 2.33 in these courses in order to continue in the B.S. program.

Physics Electives

In the following table, "electives" include Discovery courses, writing-intensive courses, physics electives, and free-choice electives. Note that physics electives can only be taken in the junior or senior year because of prerequisites, and are in general offered every other year.

Code	Title	Credits
PHYS 708	Optics	4
PHYS 710	Astrophysics I	4
PHYS 712	Space Plasma Physics	4
PHYS 718	Quantum Materials	4
PHYS 720	Nuclear Physics	4
PHYS 764	General Relativity and Cosmology	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
PHYS 400	Physics Seminar I	1
PHYS 407	General Physics I	4
MATH 425	Calculus I	4
ENGL 401	First-Year Writing	4
CHEM 403 or CHEM 405	General Chemistry I or Chemical Principles for Engineers	4
	Credits	**17**
Spring		
PHYS 408	General Physics II	4
MATH 426	Calculus II	4
CS 410P	Introduction to Scientific Programming/ Python	4
Discovery Elective		4
	Credits	**16**
Second Year		
Fall		
PHYS 505 & PHYS 506	General Physics III and General Physics III Laboratory	4
PHYS 508	Thermodynamics and Statistical Mechanics	4
MATH 528 or MATH 525	Multidimensional Calculus or Linearity I	0-6
PHYS 601	Computational Physics Recitation I	1
Discovery Elective		4
	Credits	**13-19**
Spring		
PHYS 615	Classical Mechanics and Mathematical Physics I	4
PHYS 605	Experimental Physics I	5
PHYS 602	Computational Physics Recitation II	1
Select one of the following two options:		8 or 6
(1) For students who took MATH 528:		

MATH 527 & MATH 645	Differential Equations with Linear Algebra and Linear Algebra for Applications	
(2) For students who took MATH 525:		
MATH 526	Linearity II	
	Credits	**18-16**
Third Year		
Fall		
PHYS 616	Classical Mechanics and Mathematical Physics II	4
PHYS 701	Quantum Mechanics I: Foundations, Quantum Information, and Quantum Computing	4
Discovery or Major Electives		8
	Credits	**16**
Spring		
PHYS 702	Quantum Mechanics II: Applications to Continuous Systems	4
PHYS 703	Electricity and Magnetism I	4
Discovery or Major Electives		8
	Credits	**16**
Fourth Year		
Fall		
PHYS 704	Electricity and Magnetism II	4
PHYS 705	Experimental Physics II	4
Discovery or Major Elective		4
Capstone		4
	Credits	**16**
Spring		
Electives		12
Capstone		4
	Credits	**16**
	Total Credits	**128-132**

Student Learning Outcomes

Program Learning Outcomes

- Students will master the fundamentals of mechanics, electricity and magnetism, quantum mechanics, and thermodynamics.
- Students will have a solid understanding of calculus, differential equations, and linear algebra and be able to use mathematics to solve physics problems.
- Students will be able to solve physics problems using computational methods.
- Students will be proficient at taking measurements in a physics lab and analyzing measurements to draw valid conclusions.
- Students will be well prepared for graduate study in physics and related disciplines.
- Students will be well prepared for technical careers.
- Students will be able to present scientific ideas effectively in both written and oral form.

Astronomy Minor

https://www.unh.edu/program/minor/astronomy

Description

This minor program introduces students to the fundamentals of astronomy and astrophysics and also allows students some flexibility in their choice of more focused coursework. The required courses cover the following topics : planets, stars, galaxies, cosmology, and modern astronomical tools. We have two flavors of the minor, one for those also getting a physics degree, and another for students outside of the physics major.

For further information please contact Professor Mark McConnell.

Requirements

Academic policies related to Minors.

- The minor requires a minimum of five courses as detailed in the requirements below.
- Additional courses from the list of course electives may be utilized to meet the five-course minimum.

Code	Title	Credits
Required Courses		
PHYS 406	Introduction to Modern Astronomy	4
PHYS 710	Astrophysics I	4
PHYS 711	Astrophysics II	4
PHYS 505	General Physics III (for non-physics majors only)	3
PHYS 506	General Physics III Laboratory (for non-physics majors only)	1
Select two courses (physics majors) or one course (non-physics majors) from the following:		8
ESCI 420	Our Solar System	
ESCI 741	Geochemistry	
ESCI 745	Isotope Geochemistry	
The following courses have significant physics pre-requisites and so may not be practical for non-physics majors		
PHYS 708	Optics	
PHYS 712	Space Plasma Physics	
PHYS 764	General Relativity and Cosmology	
Total Credits		**24**

Physics Minor

https://www.unh.edu/program/minor/physics

Description

This program allows students to become more deeply involved in physics without the commitment of a major.

To minor in physics, request a minor advisor at the physics office as soon as possible. Advisors assist in course selection to fit your interests, schedule, and help ensure you have met mathematical and physics prerequisites.

Requirements

Academic policies related to Minors.

Credit toward the minor will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the minor.

The following courses may NOT be used to fulfill minor requirements: PHYS 400, PHYS 401, PHYS 402, PHYS 409, PHYS 501.

Physics minors must take PHYS 407 and PHYS 408 or the equivalent. These two courses are prerequisites for all other physics courses.

Code	Title	Credits
Required Courses		
PHYS 407	General Physics I	4
PHYS 408	General Physics II	4
PHYS 505	General Physics III	3
Elective [1]		4
Elective [1]		4
Total Credits		**19**

[1] Select a four-credit physics course, chosen in consultation with the student's physics minor advisor.

1. PHYS 407, PHYS 408, PHYS 505 General Physics III & PHYS 506 General Physics III Laboratory, PHYS 508 Thermodynamics and Statistical Mechanics, PHYS 615 Classical Mechanics and Mathematical Physics I
2. PHYS 407 General Physics I, PHYS 408 General Physics II, PHYS 406 Introduction to Modern Astronomy, PHYS 615 Classical Mechanics and Mathematical Physics I, PHYS 616 Classical Mechanics and Mathematical Physics II
3. PHYS 407 General Physics I, PHYS 408 General Physics II, PHYS 615 Classical Mechanics and Mathematical Physics I, PHYS 616 Classical Mechanics and Mathematical Physics II, PHYS 703 Electricity and Magnetism I

Note: many physics courses have mathematics prerequisites. Prerequisites are listed in the course descriptions.

College of Health and Human Services

Kirsten N. Corazzini, Dean

Erin Hiley Sharp, Associate Dean, Academic Affairs

Dain LaRoche, Associate Dean, Research

The College of Health and Human Services (CHHS) prepares students for meaningful, high-impact careers across the health and human services professions through immersive, hands-on, experiential learning. Guided by faculty who are leaders in their fields, CHHS offers a diverse portfolio of undergraduate programs that blend rigorous academics with real-world practice.

Students can pursue bachelor of science degrees in communication sciences and disorders, exercise science, health and physical education, health management and policy, health sciences, human development and family studies, nursing, occupational therapy, public health, recreation management and policy, social work, and sport management and leadership.

Across all programs, students develop the professional knowledge, practical skills, and ethical foundations needed to thrive in today's workforce. CHHS also intentionally supports pathways to graduate and professional education when advanced degrees are required for licensure or professional practice, ensuring students are well prepared for continued education and credentialing. A strong grounding in the humanities and social sciences further prepares graduates to lead with cultural competence, critical thinking, and a commitment to improving health and well-being in diverse communities.

CHHS Undeclared Major

CHHS also offers an undeclared option for students who are exploring their interests, providing structured advising and early exposure to disciplines across the college to help them identify the major that best aligns with their goals.

ACE First Year Experience Program

All CHHS students take part in the ACE (Academic and Career Engagement) First-Year Experience Program, a signature initiative designed to support a confident and successful transition from high school to college.

Through personalized academic and career coaching, ACE empowers first-year students to navigate academic and co-curricular resources, build skills in active learning, reflection, and decision-making, and explore a wide range of career pathways and alumni connections. The program also fosters a strong sense of belonging, engagement, and community within CHHS and the broader UNH campus.

During their first year, ACE students enroll in ACE seminars that introduce CHHS majors, support career exploration and goal-setting, and connect students with the many academic, wellness, and professional resources available at UNH. Each student is supported by a dedicated ACE peer mentor and ACE academic coach for ongoing guidance, as well as a faculty mentor within their major unit — ensuring personalized support at every step of the first-year journey.

Degrees Offered

Bachelor of Science (B.S.)

Degree Requirements

Candidates for the Bachelor of Science (B.S.) degree must satisfy all University requirements for graduation, earn at least 128 credits, successfully complete the courses required in one of the majors described in this section, and achieve the required minimum grade-point average in the chosen curriculum. Degree candidates must satisfy all of the University Discovery and Writing Program requirements in addition to satisfying the requirements of an individual major program, which includes a senior capstone course/experience.

https://chhs.unh.edu/

Departments & Schools

- Communication Sciences and Disorders (p. 169)
- Health Management and Policy (p. 178)
- Human Development and Family Studies (p. 185)
- Kinesiology (p. 192)
- Nursing (p. 206)
- Occupational Therapy (p. 194)
- Recreation Management and Policy (p. 197)
- Social Work (p. 210)

Programs of Study

- Applied Human Anatomy and Physiology (p. 168)
- Communication Sciences and Disorders (CSD) (p. 169)
- Exercise Science (p. 171)
- Health and Physical Education (p. 172)
- Health Management and Policy (HMP) (p. 178)
- Health Sciences (p. 183)
- Human Development and Family Studies (HDFS) (p. 185)
- Kinesiology (KIN) (p. 192)
- Occupational Therapy (OT) (p. 194)
- Recreation Management and Policy (RMP) (p. 197)
- School of Nursing (p. 206)
- Social Work (SW) (p. 210)
- Sport Management and Leadership (p. 213)

Applied Human Anatomy and Physiology

- Applied Human Anatomy and Physiology Minor (p. 168)

Applied Human Anatomy and Physiology Minor

https://www.unh.edu/program/minor/applied-human-anatomy-physiology

Description

The minor is designed to provide students with an opportunity to develop knowledge and skills necessary for pursuing degrees in medicine and allied health.

Admission to the applied Human Anatomy & Physiology minor is based on successful completion of the below courses (or equivalent accepted by the minor advisor) with a grade of C or better and a minimum GPA of 2.75.

Code	Title	Credits
Prerequisite Courses		
BMS 507	Human Anatomy and Physiology I	
& BMS 508	and Human Anatomy and Physiology II	
or ANSC 511	Animal Anatomy and Physiology I	
& ANSC 512	and Animal Anatomy and Physiology II	

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
EXSC 620	Physiology of Exercise	4
KIN 652	Clinical Kinesiology	4
KIN 653A	Musculoskeletal Assessment	2
KIN 706	Neurology	6
& KIN 707	and Neurology Lab	
Select one of the following:		4
EXSC 527	Scientific Foundations of Health and Fitness	
EXSC 607	Biology of Aging	
KIN 505	Activity, Injuries and Disease	
Total Credits		**20**

Communication Sciences and Disorders (CSD)

WHAT IS COMMUNICATION SCIENCES AND DISORDERS?

Communication Sciences and Disorders is the profession devoted to assessing and treating disorders, delays, or differences in speech, language, and hearing. In this program, students learn how the ability to communicate develops —including how the brain and speech and hearing mechanisms function to support the acquisition of speech, language, social communication, and cognition. You'll review an array of communication disorders that can affect individuals across the lifespan, learning about assessment and treatment. This pre-professional degree will prepare you to successfully enter clinical or research graduate programs in areas such as audiology, speech-language pathology, cognitive science, and education.

WHY STUDY COMMUNICATION SCIENCES AND DISORDERS AT UNH?

As a student in the communication sciences and disorders (CSD) program at UNH, you will learn about speech, language, and hearing through a unique educational model that includes classroom instruction, clinical observation, and research. Students observe at the on-campus Speech-Language-Hearing Center and Clinic for Neurogenic Communication Disorders, premier diagnostic and intervention centers in New Hampshire. In addition, you have the opportunity to participate in research activities in our state-of-the-art research laboratories. For students interested, a limited number of internships are available each semester.

Communication Sciences and Disorders (CSD) is devoted to helping people overcome disabilities of speech, language, and hearing. The study of Communication Sciences and Disorders may begin in the freshman or sophomore year. Students learn about speech, language, and hearing disorders in the classroom and are involved in clinical observation in the on-campus Speech-Language-Hearing Center and can participate in research projects. Students are encouraged to take elective courses in linguistics, human development, learning theory, early childhood, health administration, special education, and various aspects of rehabilitation.

As this is a pre-professional degree, students generally pursue graduate studies in speech-language pathology or audiology at colleges or universities offering graduate programs leading to a master's or doctoral degree and to subsequent certification by the American Speech-Language-Hearing Association (ASHA). Certified clinicians find employment opportunities in hospitals, schools, community speech and hearing clinics, and private practice. Candidates for a degree must satisfy all of the University Discovery Program requirements, in addition to satisfying the requirements of the Communication Sciences and Disorders major.

The Department of Communication Sciences and Disorders offers an Accelerated Master's program that provides CSD undergraduates with the opportunity to earn graduate credit during their undergraduate senior year, shortening the length of their graduate studies, and jumpstart their careers.

https://chhs.unh.edu/communication-sciences-disorders

Programs

- Communication Sciences and Disorders Major (B.S.) (p. 169)

Faculty

Communications Sciences and Disorders Department Faculty

Communication Sciences and Disorders Major (B.S.)

https://www.unh.edu/program/bachelor-science/communication-sciences-disorders

Description

The Department of Communication Sciences and Disorders offers a Bachelor of Science degree in Communication Sciences and Disorders. In this program, students study human communication, including how it develops and how it interacts with social and cognitive systems. Students learn about speech, language, and hearing through a unique model of education, observation, and research. This pre-professional degree will prepare you to successfully enter clinical or research graduate programs in areas such as cognitive science, audiology, and speech-language pathology.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Candidates for a bachelor's degree in Communication Sciences and Disorders must satisfy all departmental as well as UNH Discovery and Writing Intensive requirements.

Students must earn a grade of C- or better in all COMM courses.

Code	Title	Credits
Required Courses		
PSYC 401	Introduction to Psychology	4
PSYC 402	Statistics in Psychology	4
LING 405	Introduction to Linguistics	4
PHYS 409	Investigating Physics	4
or CHEM 411	Introductory Chemistry for Life Sciences	
COMM 420	Survey of Communication Disorders	4
MATH 420	Finite Mathematics	4
COMM 504	Basic Audiology	4
BMS 507	Human Anatomy and Physiology I	4
COMM 521	Anatomy and Physiology of the Speech and Hearing Mechanisms	4
COMM 522	Language Acquisition	4
COMM 524	Clinical Phonetics	4
PSYC 581	Child Development	4
COMM 636	Speech and Hearing Science	4
COMM 705	Introduction to Aural Rehabilitation	4
KIN 706 & KIN 707	Neurology and Neurology Lab	6
COMM 707	Language Science	4
COMM 723	Observation Skills in Speech-Language Pathology (satisfies 25 Observation Hours)	2
COMM 741	Pediatric Speech and Language Disorders: Foundations in Clinical Decision-Making	4
COMM 742	Neurological Foundations of Communication Disorders Across the Lifespan	4
Required Breadth Course		
Select one course from the following:		3-4
ASL 435	American Sign Language I	
COMM 744	Seminar in Advanced Child Language Acquisition	
COMM 798	Special Topics	
Capstone		
COMM 724	Senior Capstone	4
or COMM 799	Honors Thesis	
Total Credits		**83-84**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
COMM 420	Survey of Communication Disorders	4
PSYC 401	Introduction to Psychology	4
BMS 507	Human Anatomy and Physiology I	4
LING 405	Introduction to Linguistics	4
	Credits	**16**
Spring		
MATH 420	Finite Mathematics	4
PHYS 409 or CHEM 411	Investigating Physics or Introductory Chemistry for Life Sciences	4
	Credits	**8**
Second Year		
Fall		
COMM 521	Anatomy and Physiology of the Speech and Hearing Mechanisms	4
COMM 524	Clinical Phonetics	4
PSYC 402	Statistics in Psychology	4
	Credits	**12**
Spring		
COMM 636	Speech and Hearing Science	4
COMM 522	Language Acquisition	4
PSYC 581	Child Development	4
	Credits	**12**
Third Year		
Fall		
COMM 504	Basic Audiology	4
KIN 706 & KIN 707	Neurology and Neurology Lab	6
COMM 798	Special Topics	4
	Credits	**14**
Spring		
COMM 707	Language Science	4
	Credits	**4**
Fourth Year		
Fall		
COMM 741	Pediatric Speech and Language Disorders: Foundations in Clinical Decision-Making	4
COMM 723	Observation Skills in Speech-Language Pathology	2
COMM 724 or COMM 799	Senior Capstone or Honors Thesis	4
	Credits	**10**

Spring		
COMM 742	Neurological Foundations of Communication Disorders Across the Lifespan	4
COMM 705	Introduction to Aural Rehabilitation	4
	Credits	**8**
	Total Credits	**84**

Student Learning Outcomes

Program Learning Outcomes

- Students completing required COMM courses will have an understanding of the theories underlying speech, language, and hearing disorders.
- All CSD students will have a capstone experience which integrates their cumulative learning.
- Students will be introduced to evidence-based practice (EBP) as it relates to the professions of speech language pathology and audiology.
- The Communication Sciences and Disorders (CSD) undergraduate curriculum aligns with the American Speech Language Hearing Association (ASHA) standards. Students completing required COMM courses will have the foundational knowledge to meet ASHA standards.
- Students completing required COMM courses will have the academic preparation to apply to either SLP or Audiology graduate programs.

Exercise Science

Programs

- Exercise Science Major (B.S.) (p. 171)

Exercise Science Major (B.S.)

https://www.unh.edu/program/bachelor-science/exercise-science

Description

This curriculum prepares students for careers in health and fitness promotion and allied programs in hospitals, sports medicine centers, wellness clinics, universities, and rehabilitation facilities. Students are also prepared for advanced degree programs in the health professions, basic biology fields, medicine, or other health-related fields.

Interested students should consult with the undergraduate major coordinator, Aurora.Vellante@unh.edu

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students must earn a grade of C (2.0) or better in every required course. Successful completion of prerequisite courses is required before advancing to sequenced and higher-level coursework.

Code	Title	Credits
Required Courses		
BMS 507 & BMS 508	Human Anatomy and Physiology I and Human Anatomy and Physiology II	8
CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	8
EXSC 520	Contemporary Perspectives in Exercise Science	4
EXSC 620	Physiology of Exercise	4
KIN 652	Clinical Kinesiology	4
EXSC 621	Exercise Laboratory Techniques	4
EXSC 649	Junior Seminar in Exercise Science	2
EXSC 650A	Internship in Exercise Science [1]	6
EXSC 651	Senior Seminar in Exercise Science	2
EXSC 704	Electrocardiography	4
EXSC 720	Science and Practice of Strength Training	4
EXSC 722	Applied Biomechanics	4
EXSC 724	Exercise Metabolism: Acute and Chronic Adaptations	4
EXSC 735	Clinical Applications of Exercise Testing	2
EXSC 736	Guidelines of Fitness and Graded Exercise Testing	2
EXSC 737	Exercise Prescription and Leadership in Healthy and Special Populations	4
EXSC 794	Cardiopulmonary Pathologies	4
EXSC 795	Practicum in Cardiac Rehabilitation	2
NUTR 400	Nutrition in Health and Well Being	4
PSYC 401	Introduction to Psychology	4
PSYC 402	Statistics in Psychology	4
or SOC 402	Statistics	
Total Credits		**84**

Code	Title	Credits
Capstone		
Students in exercise science complete the series of Capstone courses [2]		
EXSC 737	Exercise Prescription and Leadership in Healthy and Special Populations	4
EXSC 650A	Internship in Exercise Science [1]	6
EXSC 795	Practicum in Cardiac Rehabilitation	2
Total Credits		**12**

1. Students must complete EXSC 735, EXSC 736, EXSC 737 prior to enrolling in EXSC 650A.
2. These courses give students practical experience in evaluating health and fitness and prescribing exercise to a wide range of individuals. Students become proficient in assessing disease risk factors using tests of blood pressure, blood chemistry, body composition, maximal graded exercise tests#with electrocardiogram and assessed measures of strength and flexibility. Students develop individualized exercise prescriptions for assigned clients and work with them one-on-one to improve their health and fitness. The internship experience is an off-campus, 10-week, 27-hours per week, full-time experience and can only be taken after completion of EXSC737. This is typically taken during the summer after the spring academic term of the junior year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
BMS 507	Human Anatomy and Physiology I	4
ENGL 401	First-Year Writing	4
EXSC 520	Contemporary Perspectives in Exercise Science	4
PSYC 401	Introduction to Psychology	4
	Credits	**16**
Spring		
NUTR 400	Nutrition in Health and Well Being	4
BMS 508	Human Anatomy and Physiology II	4
Discovery Course: Statistics (QR)		4
Discovery Course: Fine & Performing Arts (FPA)		4
	Credits	**16**
Second Year		
Fall		
CHEM 403	General Chemistry I	4
EXSC 620	Physiology of Exercise	4
Discovery Course: Environment, Technology, and Society (ETS)		4
Discovery Course: World Cultures (WC)		4
	Credits	**16**
Spring		
CHEM 404	General Chemistry II	4
EXSC 621	Exercise Laboratory Techniques	4
KIN 652	Clinical Kinesiology	4
Discovery Course: Historical Perspectives (HP)		4
	Credits	**16**
Third Year		
Fall		
EXSC 720	Science and Practice of Strength Training	4
EXSC 724	Exercise Metabolism: Acute and Chronic Adaptations	4
EXSC 735	Clinical Applications of Exercise Testing	2
EXSC 736	Guidelines of Fitness and Graded Exercise Testing	2
Elective Course		4
	Credits	**16**
Spring		
EXSC 649	Junior Seminar in Exercise Science	2
EXSC 704	Electrocardiography	4
EXSC 737	Exercise Prescription and Leadership in Healthy and Special Populations	4
Elective Course		4
	Credits	**14**
Summer		
EXSC 650A	Internship in Exercise Science	6
	Credits	**6**
Fourth Year		
Fall		
EXSC 651	Senior Seminar in Exercise Science	2
EXSC 794	Cardiopulmonary Pathologies	4
EXSC 795	Practicum in Cardiac Rehabilitation	2
Elective Course (e.g. PHYS 401)		4
	Credits	**12**
Spring		
EXSC 722	Applied Biomechanics	4
Elective Course (e.g. PHYS 402)		4
Discovery Course: Humanities (HUMA)		4
Elective Course		4
	Credits	**16**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

- Apply fundamental principles of anatomy & physiology, chemistry, nutrition, exercise physiology, psychology, math and physics to anticipate and understand physiologic responses to acute and chronic exercise.
- Evaluate empirical literature in terms of accuracy, authority, bias and relevance, and synthesize information from a variety of sources for presentation in written and oral forms.
- Demonstrate competency in health and fitness assessments and use them to prescribe evidence-based exercise interventions to improve health, athletic performance, physical function and quality of life in diverse populations.
- Display professionally appropriate behaviors, ethical standards, sensitivity, compassion, and tolerance of individual differences, and demonstrate the ability to work in an interprofessional healthcare team.

Health and Physical Education

Programs

- Health and Physical Activity Promotion Major (B.S.) (p. 172)
- Health and Physical Activity Promotion Major: Health and Physical Education Teacher Licensure Option (B.S.) (p. 174)
- Interdisciplinary Health Education Minor (p. 177)
- Lifetime Activity Programming and Leadership Minor (p. 177)
- Physical Education Teaching Minor (p. 177)

Health and Physical Activity Promotion Major (B.S.)

https://www.unh.edu/program/bachelor-science/health-physical-activity-promotion

Description

The Health and Physical Activity Promotion major provides students a pathway to explore principles of human development, human performance, and behavior change across the lifespan. This major prepares students to work in non-clinical settings that focus on helping people to live healthy and active lifestyles across the lifespan.

The program provides students with an opportunity to take courses that deepen their learning in an area of specialized interest. This may include a self-identified grouping of courses or the declaration of a formal minor.

Students in this major can select between two options. The first, Health and Physical Activity Promotion, prepares students to work with clients of any age in a variety of settings including worksite wellness, fitness centers, community health and wellness programming, camps, sport coaching, and before/after-school programming. The second option, Health and Physical Education Teacher Licensure, specifically prepares students to teach health education and physical education in K-12 school settings.

For questions about the program, contact the undergraduate program coordinator Holly Alperin (holly.alperin@unh.edu) or call (603) 862-1211.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students must achieve a 2.5 or better cumulative GPA across major-required courses.

Code	Title	Credits
Required Courses		
HPE 500	Introduction to Health & Physical Activity Promotion	2
HDFS 525	Human Development	4
HPE 600	Movement and Gymnastics Exploration	4
HPE 601	Foundations of Lifetime Physical Activity	3
HPE 603	Game On! Playing and Leading Team Sports and Activities	3-4
or HPE 676	Adventure Activities	
or HPE 671	Health Education Pedagogy	
HPE 610	Teaching Young Children Through Movement	4
HPE 781	Introduction to Adapted Physical Education	4
EXSC 607	Biology of Aging	4
HPE 648	Moving Towards Well-Being: Principles of Health Behavior Change for Health and Wellness Educators	4
HPE 653B	Biomechanics of Human Movement	2-4
or KIN 652	Clinical Kinesiology	
or EXSC 722	Applied Biomechanics	
HPE 675	Motor Development and Learning Across the Lifespan	4
HPE 702	Health Content and Youth Risk Behavior	4
HDFS 746	Human Sexuality	4
NUTR 400	Nutrition in Health and Well Being	4
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
EXSC 620	Physiology of Exercise	4
PSYC 402	Statistics in Psychology	4
or SOC 402	Statistics	
or HMP 540	Statistics for Health and Human Service Professionals	
HPE 712	Health Education Practicum	4
or HPE 570	Elementary Physical Education Practicum	
Senior Capstone Experience		
HPE 766	Middle School and Secondary Physical Education Practicum	4
Total Credits		**74-77**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
HPE 500	Introduction to Health & Physical Activity Promotion	2
HPE 600	Movement and Gymnastics Exploration	4
NUTR 400	Nutrition in Health and Well Being	4
Discovery Course		4
	Credits	**14**
Spring		
HPE 601	Foundations of Lifetime Physical Activity	3
HPE 675	Motor Development and Learning Across the Lifespan	4
ENGL 401	First-Year Writing	4
HMP 540 or PSYC 402 or SOC 402	Statistics for Health and Human Service Professionals or Statistics in Psychology or Statistics	4
	Credits	**15**
Second Year		
Fall		
BMS 507	Human Anatomy and Physiology I	4
HPE 610	Teaching Young Children Through Movement	4
HPE 648	Moving Towards Well-Being: Principles of Health Behavior Change for Health and Wellness Educators	4
HPE 601	Foundations of Lifetime Physical Activity	3
	Credits	**15**
Spring		
BMS 508	Human Anatomy and Physiology II	4
EXSC 607	Biology of Aging	4
Activity Course		3-4
Discovery or Elective Course		4
Discovery or Elective Course		4
	Credits	**19-20**

Third Year		
Fall		
HPE 781	Introduction to Adapted Physical Education	4
HPE 702	Health Content and Youth Risk Behavior	4
EXSC 620	Physiology of Exercise	4
Discovery or Elective Course		4
	Credits	**16**
Spring		
HDFS 746	Human Sexuality	4
HPE 653B or KIN 652 or EXSC 722	Biomechanics of Human Movement or Clinical Kinesiology or Applied Biomechanics	2-4
Practicum Course		4
Discovery or Elective Course		4
Discovery or Elective Course		4
	Credits	**18-20**
Fourth Year		
Fall		
HPE 766	Middle School and Secondary Physical Education Practicum	4
Discovery or Elective Course		4
Discovery or Elective Course		4
	Credits	**12**
Spring		
Discovery or Elective Course		4
Discovery or Elective Course		4
Discovery or Elective Course		4
Discovery or Elective Course		4
	Credits	**16**
	Total Credits	**125-128**

Student Learning Outcomes

Program Learning Outcomes

- Analyze how principles of human development, human performance, and motor behavior affect well-being and movement across the lifespan.
- Apply learning theories, psychological frameworks, behavior change and human performance models to enhance health and physical activity to improve individual and community well-being.
- Use evidence-based practices to develop, implement, and manage programming that improves the health and well-being of participants.
- Assess the effectiveness of health, fitness, and wellness programs at both individual and community levels and develop strategies for data-driven improvements.
- Utilize safety and risk management best practice in a variety of programs related to health, well-being, movement, & fitness.
- Demonstrate leadership, effective communication, and ethical decision-making to enhance health, fitness, and wellness programs in diverse settings.
- Utilize current and emerging technologies to enhance assessment, engagement, and program delivery in health, fitness and wellness programs.

Health and Physical Activity Promotion Major: Health and Physical Education Teacher Licensure Option (B.S.)

https://www.unh.edu/program/bachelor-science/health-physical-activity-promotion-health-physical-education-teacher-licensure

Description

Beginning in the 2026-2027 academic year, the Health and Physical Activity Promotion: Health and Physical Education Teacher Licensure Option (B.S.) is pausing admissions to the program. Current students will continue to have access to the same high-quality education and resources until they graduate.

The Health and Physical Activity Promotion Major: Health and Physical Education teacher licensure option at UNH offers comprehensive training in promoting youth wellness and physical development. Here you'll be able to explore multiple aspects of education—from learning theory and health frameworks to physical activity principles and teaching practices.

With a focus on authentic learning experiences, hands-on teaching opportunities, and evidence-based approaches, our program prepares you to engage with children of all abilities. Through intensive coursework and practical classroom experience, you'll develop the essential skills needed to make a lasting impact on the health and well-being of school-aged youth.

The health and physical education (HPE) licensure option provides a foundation for teaching through a four-year program (BS), or the UNH Department of Education fifth-year program leading to a master of arts in teaching (MAT). Graduates become licensed to teach kindergarten through grade 12 (K-12) health education and physical education in the state of New Hampshire. Extensive supervised practicum experiences that develop teaching skills, including adaptive physical education programming, offer an excellent foundation for preparing high-quality teachers. The combination of health education with physical education and adaptive physical education makes graduates highly marketable.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Teaching candidates must receive a minimum grade of C- or better in all major-required courses with the following exceptions: Students must earn a minimum grade of B- or better in the following major-required

courses, HPE 570, HPE 675, HPE 781, and EDUC 605 and a passing grade in BMS 507 and BMS 508.

Background Check Requirements

Teaching candidates will be required to complete a background check for each teaching placement, as determined by the host site. This may include finger-printing and a background check. In addition, the state of New Hampshire requires a background check as a part of admittance to a teacher licensure preparation program. The fee for this processing is the responsibility of the teacher candidate and is paid directly to the school district or State of New Hampshire.

Clinical Placements

Teaching candidates will be required to participate in clinical teaching placements outside of the UNH campus and teacher candidates must be willing and able to travel outside of the Durham area beyond walking distances. This will require teaching candidates to have access to reliable transportation during the duration of each clinical experience. Clinical experiences typically occur within 60 miles of the UNH-Durham campus, though may be modified based on cooperating teacher availability.

Teaching Licensure Program Requirements

Teaching candidates who complete this option will have completed all course requirements to graduate from an *approved teacher preparation program*. All students in the Health and Physical Education Teacher Licensure option must meet state student-teaching requirements (e.g. basic academic skills assessment and criminal background check) and minimum 2.5 overall and 2.67 major GPA and course progression requirements confirmed through application during the spring of their junior year. Teaching candidates must present proof of current CPR/AED & First Aid certification in the areas of Standard First Aid and Adult, Child, and Infant CPR/AED from a professional organization prior to application for student teaching.

Students who do not meet requirements will be transitioned to the Health and Physical Activity Promotion major non-licensure.

Graduates of the Health and Physical Education Teacher Licensure will be eligible for recommendation to the NH Department of Education for the Health Education license and the Physical Education licensure. Licensure by the NH Department of Education also depends on meeting state subject area testing requirements and criminal background check. Completion of additional requirements are outside the UNH teacher licensure program requirements and the responsibility of the teaching candidate.

A teaching license issued by the state of New Hampshire is seen as valid in other states across the country, however each state may have their own additional requirements for licensure in that particular state.

Culminating Experience

The coursework for students choosing the four-year or five-year path to teaching licensure is exactly the same until the final semester of the undergraduate program. The culminating experience for students in the four-year teaching program is student teaching (EDUC 694D /HPE 694). Students must maintain a GPA of 2.5 to be eligible to student teach. Students choosing the fifth-year accelerated masters program receive program acceptance and complete a year-long internship, in lieu of student teaching.

Code	Title	Credits
Required Courses		
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
EDUC 605	Educational Perspectives in Critical Times	4
EXSC 620	Physiology of Exercise	4
HDFS 746	Human Sexuality	4
HPE 500	Introduction to Health & Physical Activity Promotion	2
HPE 570	Elementary Physical Education Practicum	4
HPE 600	Movement and Gymnastics Exploration	4
HPE 601	Foundations of Lifetime Physical Activity	3
HPE 603	Game On! Playing and Leading Team Sports and Activities	3
HPE 610	Teaching Young Children Through Movement	4
HPE 648	Moving Towards Well-Being: Principles of Health Behavior Change for Health and Wellness Educators	4
HPE 655	Middle School and Secondary Physical Education Pedagogy	4
HPE 653B	Biomechanics of Human Movement	2-4
or KIN 652	Clinical Kinesiology	
or EXSC 722	Applied Biomechanics	
HPE 671	Health Education Pedagogy	4
HPE 675	Motor Development and Learning Across the Lifespan	4
HPE 676	Adventure Activities	3
HPE 702	Health Content and Youth Risk Behavior	4
HPE 712	Health Education Practicum	4
HPE 781	Introduction to Adapted Physical Education	4
NUTR 400	Nutrition in Health and Well Being	4
PSYC 402	Statistics in Psychology	4
or SOC 402	Statistics	
or HMP 540	Statistics for Health and Human Service Professionals	
Senior Capstone Experience		
HPE 766	Middle School and Secondary Physical Education Practicum	4
Total Credits		**85-87**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Spring		**Credits**
HPE 603	Game On! Playing and Leading Team Sports and Activities	3
ENGL 401	First-Year Writing	4
HMP 540 or PSYC 402 or SOC 402	Statistics for Health and Human Service Professionals or Statistics in Psychology or Statistics	4
HPE 675	Motor Development and Learning Across the Lifespan	4
Discovery Course		4
	Credits	**19**
Fall		
HPE 500	Introduction to Health & Physical Activity Promotion	2
HPE 600	Movement and Gymnastics Exploration	4
NUTR 400	Nutrition in Health and Well Being	4
	Credits	**10**

Second Year		
Spring		
BMS 508	Human Anatomy and Physiology II	4
HPE 570	Elementary Physical Education Practicum	4
HPE 676	Adventure Activities	3
HPE 671	Health Education Pedagogy	4
	Credits	**15**
Fall		
BMS 507	Human Anatomy and Physiology I	4
HPE 610	Teaching Young Children Through Movement	4
HPE 648	Moving Towards Well-Being: Principles of Health Behavior Change for Health and Wellness Educators	4
HPE 601	Foundations of Lifetime Physical Activity	3
	Credits	**15**
Third Year		
Spring		
HDFS 746	Human Sexuality	4
HPE 712	Health Education Practicum	4
HPE 653B or KIN 652 or EXSC 722	Biomechanics of Human Movement or Clinical Kinesiology or Applied Biomechanics	2-4
Discovery Course		4
Discovery Course		4
	Credits	**18-20**
Fall		
HPE 655	Middle School and Secondary Physical Education Pedagogy	4
HPE 781	Introduction to Adapted Physical Education	4
HPE 702	Health Content and Youth Risk Behavior	4
EXSC 620	Physiology of Exercise	4
Discovery Course		4
	Credits	**20**
Fourth Year		
Spring		
EDUC 694D	Supervised Teaching/Kinesiology	4
HPE 694	Supervised Teaching in Health and Physical Education	6
Discovery Course		4
	Credits	**14**
Fall		
EDUC 605	Educational Perspectives in Critical Times	4
HPE 766	Middle School and Secondary Physical Education Practicum	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
	Total Credits	**127-129**

Student Learning Outcomes

Program Learning Outcomes

- Apply evidence-based pedagogical practices that enable effective teaching of health education, physical education, and adapted physical education at all levels.
- Create a learning environment that allows each student to feel safe, challenged, valued, and a sense of belonging by embracing the unique strengths each student brings into the classroom and gymnasium.
- Integrate foundational knowledge and skills of health education and physical education to enhance instructional effectiveness and student learning outcomes.
- Design standard-based curriculum for health education and physical education that supports the development of students' intellectual, physical, social and emotional well-being.
- Design and implement authentic and standardized assessments for health education and physical education that will enhance and inform student learning.
- Demonstrate leadership, effective communication, and ethical decision-making.
- Utilize current and emerging technologies to enhance assessment, engagement, and program delivery in health education and physical education.
- Facilitate interdisciplinary collaboration that improves the health and well-being of students in K-12 settings.

Disclosures

Health and Physical Activity Promotion Major: Health and Physical Education Teacher Licensure Option (B.S.)

Location/Delivery: College of Health and Human Services, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Health and Physical Education K-12

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Interdisciplinary Health Education Minor

https://www.unh.edu/program/minor/interdisciplinary-health-education

Description

The Interdisciplinary Health Education Minor prepares future professionals to approach health and well-being through a culturally-responsive and trauma-informed lens across multiple dimensions of wellness. Students gain the knowledge and skills to promote, support, and affect behavior change in ways that positively impacts the health and well-being of individuals and communities. Those who complete this minor have the ability to apply their knowledge and skills in settings such as schools, before/after-school programs, clinical settings, community health centers, fitness centers, and/or corporate settings.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Core Required Courses		
HPE 648	Moving Towards Well-Being: Principles of Health Behavior Change for Health and Wellness Educators	4
HPE 671	Health Education Pedagogy	4
Electives		
Select 3 courses from the following:		12
EXSC 527	Scientific Foundations of Health and Fitness	
HDFS 746	Human Sexuality	
HMP 669	Human Behavior and the Public Health	
HMP 403	Introduction to Public Health	
HPE 702	Health Content and Youth Risk Behavior	
HPE 712	Health Education Practicum	
HS 770	General Medical Conditions for Health Professions	
NUTR 400	Nutrition in Health and Well Being	
NUTR 610	Nutrition Education and Counseling	
Total Credits		**20**

The following tracks below serve as a guide for students though no requirements exist to complete the minor in a specific track.

School Health: For students interested in school health education, consider the following courses, HPE 702 Health Content and Youth Risk Behavior, HPE 712 Health Education Practicum, HDFS 746 Human Sexuality, NUTR 400 Nutrition in Health and Well Being, EXSC 527 Scientific Foundations of Health and Fitness.

Public Health: For students interested in public and community health education, consider the following courses, NUTR 610 Nutrition Education and Counseling, HMP 669 Human Behavior and the Public Health, HMP 403 Introduction to Public Health, HDFS 746 Human Sexuality, EXSC 527 Scientific Foundations of Health and Fitness, HS 770 General Medical Conditions for Health Professions.

Note some courses have prerequisites.

Students may overlap no more than 8 credits between their major and a minor.

Lifetime Activity Programming and Leadership Minor

https://www.unh.edu/program/minor/lifetime-activity-programming-leadership

Description

The minor in Lifetime Activity Programming and Leadership is for students with an interest in working with youth in out-of-school activity settings such as before or after school programs, summer camps, outdoor/adventure settings, etc. The majority of courses will engage students in purposeful movement and will be physically engaging. Each course will have a teaching component that prepares students to facilitate the various activities with young people in a wide-range of environments.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
HPE 655	Middle School and Secondary Physical Education Pedagogy	4
HPE 781	Introduction to Adapted Physical Education	4
HPE 601	Foundations of Lifetime Physical Activity	3
HPE 603	Game On! Playing and Leading Team Sports and Activities	3
HPE 676	Adventure Activities	3
Electives		
Select two courses from the following:		4-6
OUT 539	Artificial Climbing Wall Management	
OUT 542	Sea Kayaking	
OUT 551	Adventure Programming: Backcountry Based Experience	
OUT 552	Adventure Programming: Water Based Experiences	
LAP 500 Level Course		
Total Credits		**21-23**

Physical Education Teaching Minor

https://www.unh.edu/program/minor/physical-education-teaching

Description

The minor in Physical Education Teaching is for students with an interest in pursuing a graduate degree to teach physical education after completing their undergraduate degree at UNH. The coursework and practicum experiences lay the foundation for understanding teaching using best practices in the physical education field. The courses provide a foundation in how to teach physical education along with specific instruction on teaching pupils with disabilities. A combination of activity-based courses and field experiences at a local elementary, middle or high school give students a true sense for what teaching physical education is all about. Upon completion of this minor, students will have the baseline content knowledge and experience to teach physical education if they choose to pursue teaching certification at the graduate school level.

Requirements

Academic policies related to Minors.

Required Courses

Code	Title	Credits
HPE 610	Teaching Young Children Through Movement	4
HPE 655	Middle School and Secondary Physical Education Pedagogy	4
HPE 781	Introduction to Adapted Physical Education	4
HPE 603	Game On! Playing and Leading Team Sports and Activities	3
KIN 501	First Aid: Responding to Emergencies	1
HPE 570	Elementary Physical Education Practicum	4
or HPE 766	Middle School and Secondary Physical Education Practicum	
Total Credits		**20**

Health Management and Policy (HMP)

Health Management and Policy is an interdisciplinary program providing students with a broad view of healthcare organizational structure and healthcare policy, while developing analytical skills that are integrated within courses and computer laboratories throughout the curriculum. Students are prepared to pursue careers in a wide range of healthcare organizations focusing on the business aspects and public health aspects within healthcare leadership. Graduates work in private practices, long-term care, rehabilitation facilities, hospitals, start-up organizations, urgent care centers, and other managed care organizations in such areas as finance, information systems, management, marketing, operations, project management, as well as public health departments, community health, community-based and home-health agencies, mental health facilities, regulatory bodies, consulting companies, and insurance companies.

Students have the opportunity to become student members in the Medical Group Management Association (MGMA), American College of Healthcare Executives (ACHE), the Health Care Financial Management Association (HFMA), the American Public Health Association (APHA), and the New Hampshire Public Health Association (NHPHA) to establish a professional network and be informed on current issues within the field. The Health Management and Policy curriculum is approved under the New England Commission of Higher Education (NECHE).

https://chhs.unh.edu/health-management-policy

Programs

- Health Analytics Minor (p. 178)
- Health Management and Policy Major (B.S.) (p. 178)
- Health Management Minor (p. 181)
- Public Health Major (B.S.) (p. 181)
- Public Health Minor (p. 183)

Faculty

Health Management & Policy Department Faculty

Health Analytics Minor

https://www.unh.edu/program/minor/health-analytics

Description

The objective of this minor is to provide a basic background in analytics for those who are pursuing majors in health or health related fields but would like a more data and analytic rich skills set. The minor will take an application-oriented focus and is intended for those students interested in more exposure to the underlying data related components of data visualization, the data and analytic ecosystem within organizations and society, and the use and implications for use of health analytics. The minor assumes preparation in an undergraduate statistics class.

The minor is meant to allow students to both have a core related to health analytics, but also customize their approach along the continuum of skills via the use of the two electives. For example, students wishing to become more hands on data practitioners and thus facile with the programming environment can do that, whereas students who wish to be more focused on data consumption or data translation for change can elect for that option.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
HMP 401	United States Health Care Systems	4
HMP 512	Using Data to Improve Human Health	4
HMP 703	Translation of Health Data	4
Electives		
Select two courses from the following:		8
ADMN 410	Management Information Systems	
CS 408	Living in a Networked World: The Good, the Bad, and the Ugly	
CS 417	From Programs to Computer Science	
CS 501	Professional Ethics and Communication in Technology-related Fields	
DATA 557	Introduction to Data Science and Analytics	
DS 673	Database Management	
DS 662	Programming for Business	
HMP 501	Epidemiology and Community Medicine	
HMP 702	Programming in Healthcare Environments	
HMP 711	Introduction to Healthcare Operations Analytics	
HMP 712	Healthcare Operations Management	
IT 403	Introduction to Internet Technologies	
MATH 645	Linear Algebra for Applications	
Total Credits		**20**

Health Management and Policy Major (B.S.)

https://www.unh.edu/program/bachelor-science/health-management-policy

Description

The Health Management & Policy (HMP) curriculum includes a variety of healthcare content areas, such as data, epidemiology, finance, management, marketing, policy, and elective public health courses. Students complete a core of introductory courses prior to junior year. Junior and senior HMP major courses are designed to build sequential knowledge and includes a summer internship.

Students are assigned an HMP faculty advisor to provide guidance on major and University required courses. This Bachelor of Science degree prepares students to be knowledgeable in healthcare upon graduation, with employment opportunities including (but not limited to) healthcare consultants, health data analysts, sales, introductory project management roles, and administrators in training for long term care facilities. Many HMP graduates pursue graduate degrees in business, epidemiology, law, public health, and project management.

It is important to note that internal and external transfers may require an extra year due to prescribed course sequence. Students interested in studying abroad should plan to do so prior to their junior year.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- HMP majors must obtain a minimum grade of C in all required courses and prerequisite courses.
- Majors must maintain an overall grade-point average of 2.0 to remain in the major.

Code	Title	Credits
Required Courses		
HMP 401	United States Health Care Systems	4
HMP 403	Introduction to Public Health	4
HMP 501	Epidemiology and Community Medicine	4
HMP 512	Using Data to Improve Human Health	4
HMP 621	Pre-practicum Seminar	2
HMP 622	Field Practicum in Organizational and Project Analysis, and Management Skills Development	3
HMP 624	Post Practicum Seminar	2
HMP 631	Health Issues Seminar	2
HMP 635	Healthcare Marketing	4
HMP 642	Health Economics	4
HMP 703	Translation of Health Data	4
HMP 711	Introduction to Healthcare Operations Analytics	4
HMP 712	Healthcare Operations Management	4
HMP 721	Managing Health Care Organizations	4
HMP 722	Health Care Management II	4
HMP 723	Health Planning	4
HMP 740	Health Care Financial Management	4
HMP 741	Health Care Financial Management II	4
HMP 742	Strategic Management for Health Care Organizations (HMP Track Course)	4
HMP 744	Law and Ethics in Healthcare	4
HMP 746	Health Policy	4
Statistics Course [1]		
Select one course from the following:		
HMP 540	Statistics for Health and Human Service Professionals	4
or MATH 439	Statistical Discovery for Everyone	
or PSYC 402	Statistics in Psychology	
or SOC 402	Statistics	
or ADMN 510	Business Analytics and Statistics	
Honors in Major		
HMP 798H	Honors Project/Research Design [2]	2
HMP 799H	Honors Project/Research [3]	4

1 AP Statistics does not meet the statistics requirement.
2 HMP 798H is taken for two credits Fall of senior year, if selected for Honors in Major.
3 HMP 799H is taken for four credits Spring of senior year, if completing the Honors in Major thesis.

Field Practicum

HMP 622 Field Practicum in Organizational and Project Analysis, and Management Skills Development is the required 400 hour 10-week field practicum, (or administrative internship), which constitutes an essential part of the HMP academic program. The field practicum occurs during the summer between junior and senior year, typically beginning in late May and ending in late August, requiring a full-time commitment of the student. Students must be an HMP major, in good academic standing in the major, and must retain a cumulative GPA of 2.00 or higher to be granted permission to enroll in the course.

This experience allows students to explore an area of special interest in depth that integrates class work with a supervised field experience. Given sufficient timing of student requests, efforts will be made to arrange practica at distant sites based on special needs. Field practicum sites are selected with student involvement. Typical sites are often concentrated in central and Northern New England, but the experience could also be elsewhere, including abroad.

Academic Requirements

HMP majors must obtain a minimum of a C in all HMP required courses and prerequisite courses. Majors must have an overall grade-point average of 2.00 to remain in the major. Students not continuing to make progress in the major, as evidenced by a low grades (below C), incomplete courses, and/or administrative failures resulting in a cumulative GPA lower than 2.0 may, upon determination by the Health Management and Policy faculty, be excluded from the major and participation in the Field Practicum. Students must complete HMP 401 , HMP 403 , HMP 501 , HMP 512 , and Statistics with a C or better prior to Fall semester of junior year or they will be excluded from the major. An exclusion from the major may also be necessary to resolve questions concerning major departmental requirements or University academic standards.

The academic action of *exclusion* could be a temporary action. Consideration for a temporary action requires that a petition is completed by the student detailing the *extenuating* circumstances and providing supportive documentation to the Health Management and Policy Department for review by faculty with a determination of approval. Should a petition be granted *approval to remain in the major* due to extenuating circumstances, the student must demonstrate academic progress (C in HMP courses and 2.0 GPA) the following semester or they will be excluded from the major without the option to return. If the petition is not determined approved by the faculty, students will be required to change their major.

Internal Applications for HMP Major

Students interested in additional information or in applying for admission to the health management and policy major should attend an HMP information session, and/or contact the academic department

coordinator. Efforts should be made to complete this process during the freshman year or early in the sophomore year to ensure sufficient time to complete the required courses, HMP 401 , HMP 403 , HMP 501 , HMP 512 , and Statistics prior to junior year. Failure to complete the five required courses prior to junior year will result in exclusion from the major. Admitted UNH students can apply to the major once the student meets the application requirements, a minimum cumulative GPA of 2.00; however all HMP required courses must be completed with a C or better to progress in the major.

Honors in Major

The department offers an honors-in-major program. Students must meet the department's requirement of having an overall 3.7 grade-point average at UNH and a 3.7 grade-point average for required HMP courses taken by the end of the spring semester sophomore year to be invited to Honors-in-Major. Honors-in-major students take a total of three honors designated major courses during the junior year and senior year, as well as completing an honors thesis project during the senior year, HMP 798H and HMP 799H . Students work on the honors thesis with a faculty member within the HMP department who has knowledge in the specific topic. Students should contact the academic department coordinator for further information.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
HMP 401	United States Health Care Systems	4
HHS 401	College of Health and Human Services Seminar	2
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**18**
Spring		
HMP 403	Introduction to Public Health	4
HHS 402	Spring ACE Seminar	1-2
HMP 512	Using Data to Improve Human Health	4
Discovery Course		4
Discovery Course		4
	Credits	**17-18**
Second Year		
Fall		
HMP 501	Epidemiology and Community Medicine	4
Statistics Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
HMP 621	Pre-practicum Seminar	1
HMP 703	Translation of Health Data	4
HMP 721	Managing Health Care Organizations	4
HMP 740	Health Care Financial Management	4
HMP 744	Law and Ethics in Healthcare	4
	Credits	**17**
Spring		
HMP 621	Pre-practicum Seminar	1
HMP 635	Healthcare Marketing	4
HMP 642	Health Economics	4
HMP 711	Introduction to Healthcare Operations Analytics	4
HMP 741	Health Care Financial Management II	4
	Credits	**17**
Summer		
HMP 622	Field Practicum in Organizational and Project Analysis, and Management Skills Development	3
	Credits	**3**
Fourth Year		
Fall		
HMP 624	Post Practicum Seminar	2
HMP 712	Healthcare Operations Management	4
HMP 722	Health Care Management II	4
HMP 723	Health Planning	4
Elective Course		4
	Credits	**18**
Spring		
HMP 631	Health Issues Seminar	2
HMP 742	Strategic Management for Health Care Organizations	4
HMP 746	Health Policy	4
Elective Course		4
Elective Course		4
	Credits	**18**
	Total Credits	**140-141**

Student Learning Outcomes

Program Learning Outcomes

- The complexity of the health care delivery system, quality of care, and it relates to population health as well as the complexity of financing of the US healthcare delivery model.
- Analyze complex management situations, data and apply (appropriate) health management concepts, theories and models to develop recommendations, working within a team environment.

- Ability to describe and discuss the role of Human resource functions and the laws governing, the difference between management and leadership, organizational structures, mergers, acquisitions and affiliations and the role of governmental laws and regulations.
- Identify and prioritize organizational needs and market imperatives in design and development of business plans for health Programs and services in a variety of management settings to compile, present and discuss data and its limitations related to specific managerial problems and ethics for organizational decision making based on regulations and principles that govern the domains and the role of management and leadership.
- Use pf computer analysis tools for calculating, aggregating, presenting and discussing data and its analysis.
- Understand the importance of a Mission and Vision statements and Identification and involvement of stakeholders, recognizing political and legal implications of actions and decisions.
- Describe and generally assess key concepts and elements of health information systems selection and implementation of health care systems and regulatory requirements related to clinical and financial systems, and the role in HIT/HIM as it relates to cost, quality and access.
- Application of economic theory and current mechanisms for advanced financial knowledge to decision making and strategic thinking skills, ability to identify and target market segment and defined appropriate intervals to measure. the time value of money, long-term debt, stocks and equity, and evaluation of capital projects.
- Communicate information, ideas and information effectively in a written and oral format using appropriate professional conventions.

Health Management Minor

https://www.unh.edu/program/minor/health-management

Description

The department of Health Management and Policy (HMP) offers an integrated minor in health management, designed for students in majors outside of Health Management and Policy who are interested in learning about the business leadership aspects of healthcare. Students seeking to minor in health management should meet with the academic department coordinator to discuss the requirements.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits).

A minimum grade of C- or better is required in coursework for the minor.

Code	Title	Credits
Required Courses		
HMP 401	United States Health Care Systems	4
HMP 721	Managing Health Care Organizations [1]	4
HMP 740	Health Care Financial Management	4
Electives		
Select two courses from the following: [1,2]		8
HMP 501	Epidemiology and Community Medicine	
HMP 642	Health Economics	
HMP 669	Human Behavior and the Public Health	
HMP 703	Translation of Health Data	
HMP 711	Introduction to Healthcare Operations Analytics	
HMP 712	Healthcare Operations Management	
HMP 722	Health Care Management II [1]	
HMP 741	Health Care Financial Management II [1]	
HMP 744	Law and Ethics in Healthcare	
Total Credits		**20**

[1] HMP 401 must be taken before completing 600 and 700 level courses.
[2] Prerequisite courses must be completed for all HMP courses.

Public Health Major (B.S.)

https://www.unh.edu/program/bachelor-science/public-health

Description

The Bachelor of Science in Public Health (BSPH) program provides students with a multi-disciplinary understanding of public health and its determinants. It does this through both core and elective courses examining epidemiology, statistics and data visualization, environmental health, health policy, health communication, and social and behavioral health. The program is designed to prepare students to address public health challenges by examining health equity, disease monitoring and prevention, environmental/planetary health, health policy and promotion and integrative health systems broadly defined.

Throughout the program, students will gain both theoretical knowledge and practical skills necessary to analyze health data, understand the social determinants of health, develop health interventions, and influence health policy and practice. They will engage in coursework that integrates scientific principles with real-world applications in areas such as public health ethics, infectious disease control, and health communication. Coursework will support the core functions of public health: assessment, policy development, and assurance.

Graduates of the BSPH program will be equipped for diverse career opportunities in government agencies, non-profit organizations, healthcare systems, and private industry, or for advanced studies in public health, medicine, or related fields. The program emphasizes experiential learning through the capstone project and fosters a hands-on approach to solving multi-sectoral public health issues at local, national, and global levels.

Students have the opportunity to become student members in the American Public Health Association (APHA), and the New Hampshire Public Health Association (NHPHA) to establish a professional network and be informed on current issues within the field.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.

Major GPA requirements as indicated.

Major Requirements

Students begin the curriculum with preprofessional courses, which include courses in health care systems, public health, health communication epidemiology and statistics. In addition to meeting the University Discovery and Writing Program requirements, students must complete both the core and courses and select electives from each of the interdisciplinary foci in Health Assessment, Policy Development, Health Assurance and Spatial Mapping.

- Majors must obtain a minimum grade of C in all required courses and prerequisite courses.
- Majors must maintain an overall grade-point average of 2.0 to remain in the major.

Code	Title	Credits
Required Core Courses		
HMP 401	United States Health Care Systems	4
or SOC 635W	Medical Sociology	
HMP 403	Introduction to Public Health	4
HMP 501	Epidemiology and Community Medicine	4
or NUTR 709	Nutritional Epidemiology	
HMP 512	Using Data to Improve Human Health	4
HMP 540	Statistics for Health and Human Service Professionals	4
or MATH 439	Statistical Discovery for Everyone	
or PSYC 402	Statistics in Psychology	
or SOC 402	Statistics	
or ADMN 510	Business Analytics and Statistics	
HMP 642	Health Economics	4
or ECON 401	Principles of Economics (Macro)	
HMP 669	Human Behavior and the Public Health	4
HMP 703	Translation of Health Data	4
HMP 715	Environmental Health	4
HMP 744	Law and Ethics in Healthcare	4
HMP 746	Health Policy	4
or HLTC 738	Health Care Policy	
Policy Development		
Select two courses from the following:		8
CEP 415	Community Development Perspectives	
INCO 505B	Social Innovator's Toolbox	
HDFS 760	Family Programs and Policies	
NR 602	Natural Resources and Environmental Policy	
RMP 668	Youth Culture and Programs	
SOC 645	Class, Status and Power	
SW 440A	Honors/Healthy Communities: Environmental Justice and Social Change	
SW 525	Social Welfare Policy: History of Social and Economic Justice	
SW 625	Social Welfare Policy: Analysis, Activism, and Advocacy	
SW 702	Aging and Society	
SW 705	Child and Adolescent Risks and Resiliency: Program, Policy and Practice	
MARI 805	Introduction to Coastal and Marine Policy: Understanding US Ocean, Coastal, and Great Lakes Policy	
Assurance		
Select two courses from the following:		8
CEE 520	Environmental Pollution and Protection: A Global Context	
GEOG 500	Making Change: Social and Environmental Justice in Practice	
GEOG 670	Climate and Society	
GEOG 701	Environmental Justice	
HDFS 757	Race, Class, Gender, and Families	
HMP 712	Healthcare Operations Management	
HMP 721	Managing Health Care Organizations	
SUST 401	Exploring Sustainability	
SUST 501	Sustainability in Action	
SW 500	I'm Old, So What! An introduction to aging in the United States	
SW 630	Anti Oppressive Practice in Social Work	
SW 660	Exploring Issues in Housing and Homelessness	
SW 712	Understanding Developmental Disabilities	
HPE 648	Moving Towards Well-Being: Principles of Health Behavior Change for Health and Wellness Educators	
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	
GIS		
Select one course from the following:		4
GEOG 591	Making Maps: GIS Fundamentals	
NR 658	Introduction to Geographic Information Systems	
Methods		
Select one course from the following:		4
BIOL 633	Data Analysis for Life Science	
INCO 505A	Becoming a Problem Solver	
SOC 601	Methods of Social Research	
SOC 725	Social Demography	
Communication		
Select two courses from the following:		8
CMN 540	Special Topics in Communication	
CMN 662	Public Dialogue and Deliberation	
CMN 675 & CMN 676	Civil Discourse Lab: Public Dialogue, Equity, & Authenticity and Civil Discourse Lab: Public Deliberation and Issue Framing	
HMP 635	Healthcare Marketing	
Capstone		
HMP 749	Public Health Capstone: Integrative Experience	4
Total Credits		**80**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
HMP 401 or HMP 403	United States Health Care Systems or Introduction to Public Health	4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
HMP 401 or HMP 403	United States Health Care Systems or Introduction to Public Health	4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
HMP 512	Using Data to Improve Human Health	4
HMP 540	Statistics for Health and Human Service Professionals	4
Elective/Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
HMP 501	Epidemiology and Community Medicine	4
Elective/Discovery Course		4

Elective/Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
HMP 642	Health Economics	4
HMP 703	Translation of Health Data	4
Elective/Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
HMP 669	Human Behavior and the Public Health	4
Elective/Discovery Course		4
Elective/Discovery Course		4
Elective/Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
HMP 744	Law and Ethics in Healthcare	4
Elective/Discovery Course		4
Elective/Discovery Course		4
Elective/Discovery Course		4
	Credits	**16**
Spring		
HMP 746	Health Policy	4
HMP 715	Environmental Health	4
Elective/Discovery Course		4
Elective/Discovery Course		4
	Credits	**16**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

- Apply Core Public Health Principles: Demonstrate a foundational understanding of public health concepts such as epidemiology, biostatistics, health promotion, environmental health, and disease prevention to address population health challenges. Knowledge and skills will support the core functions of public health: assessment, policy development, and assurance.
- Analyze Public Health Data: Use quantitative and qualitative research methods to analyze public health data, identify health trends, and assess the effectiveness of public health interventions.
- Understand Social Determinants and Vital Conditions of Health: Analyze how social, cultural, economic, and environmental factors impact health outcomes and contribute to health disparities within populations.
- Develop and Implement Public Health Interventions: Design and apply evidence-based strategies and interventions that promote health, prevent disease, and improve the well-being of communities.
- Communicate Public Health Information: Effectively communicate public health concepts, research findings, and health policies to diverse audiences, including policymakers, healthcare professionals, and the general public.
- Evaluate Public Health Policies: Critically assess existing public health policies, programs, and laws, and advocate for policy changes that improve population health and health equity.
- Practice Ethical Public Health Leadership: Demonstrate ethical decision-making, both fiduciary and practical, and overall leadership, in public health practice, considering the diverse needs of populations while advocating for justice, equity, and inclusion.
- Collaborate in Multidisciplinary Teams: Work effectively within interdisciplinary teams to address complex public health issues through collaborative problem-solving and community engagement.

Public Health Minor

https://www.unh.edu/program/minor/public-health

Description

The department of Health Management and Policy offers a minor in public health. Public health deals with the health of populations and focuses on health promotion and disease prevention, as well as access to the medical system. The minor introduces students to many of the foundation areas of public health and provides basic exposure to key concepts and skills in the five core disciplines of public health, as articulated by the Council on Education for Public Health. The minor is open to baccalaureate students outside of the Health Management and Policy major at UNH. Students interested in this field may decide to continue their education with the Master of Public Health (MPH), which is also offered through the Department of Health Management and Policy.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
HMP 403	Introduction to Public Health	4
HMP 501	Epidemiology and Community Medicine	4
HMP 669	Human Behavior and the Public Health	4
HMP 715	Environmental Health	4
Select one course from the following: [1,2]		4
HMP 512	Using Data to Improve Human Health	
HMP 635	Healthcare Marketing	
HMP 703	Translation of Health Data	
HMP 746	Health Policy	
HDFS 586	Families at Risk	
HPE 702	Health Content and Youth Risk Behavior	
OT 513	Stressed Out: The Science and Nature of Human Stress	
RMP 490	Recreation & Tourism in Society	
SW 525	Social Welfare Policy: History of Social and Economic Justice	
Total Credits		**20**

1 All prerequisite courses must be met for any listed courses.
2 Other courses could be considered by submission of an academic petition.

Health Sciences

- Health Sciences Major (B.S.) (p. 184)

Health Sciences Major (B.S.)

https://www.unh.edu/program/bachelor-science/health-sciences

Description

The Health Sciences program is designed for students who are committed to joining the distinguished community of health care professionals. Students build essential academic and professional skills while completing rigorous prerequisite coursework that prepares them for advanced study in the health professions, particularly for those who aspire to become health care providers. As many professional programs now require post-baccalaureate training, the curriculum emphasizes the preparation needed to be competitive for admission to graduate or professional school. While many graduates pursue advanced training in fields such as physician assistant studies, medicine, physical therapy, nursing, and related health professions, others enter the workforce in hospital, clinical, or community-based health settings.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students are required to have earned a minimum, cumulative, GPA of 2.85 by the end of their Sophomore/2nd Year in the Health Sciences Major. Students are also required to achieve a C or better in all required courses in the major. Students with a GPA below 2.85 will be excluded (removed) from the Health Sciences Major.

Code	Title	Credits
Required Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
HS 501	Medical Terminology	2
HS 605	Exploration of Allied Health Professions	2
HS 656	Musculoskeletal Pathologies for Health Professions	4
HS 657	Musculoskeletal Pathologies for Health Professions Lab	1
HS 702	From Lab to Life: Interpretation of Research to Guide Clinical Practice	4
HS 717	Cultural Considerations in Health Care	4
HS 741	The Art and Science of Healthcare Practice: Integrating Clinical Knowledge with Professional Skills	4
HS 767	Pharmacology for Health Professions	4
HS 770	General Medical Conditions for Health Professions	4
NUTR 400	Nutrition in Health and Well Being	4
KIN 684 & KIN 685	Emergency Medical Care: Emergency Medical Technician (EMT) and Emergency Medical Care: EMT Lab	6
PHYS 401	Introduction to Physics I	4
PSYC 401	Introduction to Psychology	4
HMP 401	United States Health Care Systems	4
HMP 744	Law and Ethics in Healthcare	4
PSYC 402	Statistics in Psychology [1]	4
or SOC 402	Statistics	
or HMP 540	Statistics for Health and Human Service Professionals	

[1] Any UNH statistics course satisfies the requirement with advisor approval.

Required University Courses

Candidates for a degree must satisfy all of the University Discovery requirements in addition to satisfying the requirements of the Health Sciences curriculum and any pre-requisite coursework needed to apply to the graduate programs they plan to pursue.

Recommended Electives

A student's plan of elective courses should align with post-baccalaureate pursuits, and be approved by a Health Sciences advisor.

Recommended electives for future health professionals that are external to the Health Sciences courses may include course work in Communication Sciences & Disorders, Human Development & Family Studies, Health & Human Services, Health Management & Policy, Kinesiology, Nursing, Occupational Therapy, Recreation Management & Policy, Social Work, and other coursework in the life sciences and health and human services.

Code	Title	Credits
BMCB 658 & BMCB 659W	General Biochemistry and General Biochemistry Lab	5
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
EXSC 620	Physiology of Exercise	4
GEN 604	Principles of Genetics	4
KIN 652	Clinical Kinesiology	4
KIN 706	Neurology	4
PHYS 402	Introduction to Physics II	0
PSYC 561	Psychopathology	4
PSYC 581	Child Development	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
BIOL 411	Introductory Biology: Molecular and Cellular	4
HMP 401	United States Health Care Systems	4
ENGL 401	First-Year Writing	4
Discovery/Elective		4
	Credits	**16**
Spring		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
HS 501	Medical Terminology	2

PSYC 401	Introduction to Psychology	4
Discovery/Elective		4
Discovery/Elective		4
	Credits	**18**
Second Year		
Fall		
HS 605	Exploration of Allied Health Professions (fall or spring)	2
BMS 507	Human Anatomy and Physiology I	4
KIN 684 & KIN 685	Emergency Medical Care: Emergency Medical Technician (EMT) and Emergency Medical Care: EMT Lab	6
Discovery/Elective		4
	Credits	**16**
Spring		
NUTR 400	Nutrition in Health and Well Being	4
BMS 508	Human Anatomy and Physiology II	4
PSYC 402	Statistics in Psychology [1]	4
Discovery Elective		4
	Credits	**16**
Third Year		
Fall		
CHEM 403	General Chemistry I	4
HS 770	General Medical Conditions for Health Professions	4
HS 656	Musculoskeletal Pathologies for Health Professions	4
HS 657	Musculoskeletal Pathologies for Health Professions Lab	1
Discovery Elective (see recommended electives under requirements)		4
	Credits	**17**
Spring		
CHEM 404	General Chemistry II	4
HS 767	Pharmacology for Health Professions	4
HMP 744	Law and Ethics in Healthcare	4
HS 702	From Lab to Life: Interpretation of Research to Guide Clinical Practice	4
	Credits	**16**
Fourth Year		
Fall		
HS 741	The Art and Science of Healthcare Practice: Integrating Clinical Knowledge with Professional Skills	4
PHYS 401	Introduction to Physics I	4
Discovery Elective (see recommended electives under requirements)		4
Discovery Elective (see recommended electives under requirements)		4
	Credits	**16**
Spring		
HS 717	Cultural Considerations in Health Care	4
Discovery Elective (see recommended electives under requirements)		4
Discovery Elective (see recommended electives under requirements)		4
Discovery Elective (see recommended electives under requirements)		4
	Credits	**16**
	Total Credits	**131**

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate understanding of core principles of biology, chemistry, physics, anatomy and physiology, psychology, and kinesiology.
- Demonstrate comprehension of musculoskeletal evaluation and assessment techniques.
- Demonstrate responsiveness to cultural considerations in healthcare. a.) Understand influence of age, race, ethnicity, gender, sexual orientation, spirituality, socioeconomic status, and other aspects of diversity on individual healthcare needs and health-related quality of life.
- Demonstrate an understanding of scientific research and writing. a.) Ability to identify and analyze scholarly literature. b.) Ability to synthesize and articulate research findings through writing.
- Demonstrate knowledge of behaviors, scopes of practice, and legal and ethical standards for health professions.
- Understand concepts of evidence-based practice and patient-centered care for health professions.

Human Development and Family Studies (HDFS)

As a human development and family studies major at UNH, you'll learn to promote the health and well-being of children, individuals, and families. The program curriculum embraces diversity and emphasizes excellence and innovation in best practice, preparing you for a variety of in-demand careers and graduate programs in education, social services, healthcare, and more. Within the major, students specialize in one of three options: child development, early childhood education teacher licensure, or family and lifespan development.

As a major public research university, UNH emphasizes hands-on experience and research opportunities. Students in the human development and family studies major have multiple opportunities to put theory into practice through practicum and internship opportunities at the Child Study and Development Center, and in schools and community-based settings that serve individuals and families.

Human Development and Family Studies degree options:

- **Child Development**: provides specialized knowledge on the development of infants and children, preparing professionals to work in a variety of careers centered on enhancing child well-being.
- **Early Childhood Education (ECE) Teacher Licensure**: focuses on young children's early learning and teaching strategies to support such learning. This option is approved by the NH State Department of Education with successful completion leading to eligibility for licensure as an early childhood educator (birth - 3rd grade) in the State of NH.
- **Family and Lifespan Development:** emphasizes the quality, and impact of, relationships across the lifespan and individual growth and

well-being, preparing professionals to work in a variety of careers that focus on supporting couples, families, or individuals at any age.

Students in the ECE Teacher Licensure option are required to complete a full-year ECE student teaching internship senior year. Students in the Child Development and Family and Lifespan Development options may choose to apply to the optional, full-year, senior year HDFS Community Internship program. Community internship sites include a variety of non-profit and social service agencies around the Seacoast region of New Hampshire with great care taken to match students to sites that best support their career objectives.

Minors:

The Human Development and Family Studies department offers three complementary undergraduate minors. An undergraduate minor allows students to demonstrate a special area of interest, focus, or expertise and supports their academic major and future educational and career goals. Each HDFS minor highlights key aspects of individual and family development.

- **Child Life**
- **Adolescent and Youth Development**
- **Human Development and Family Studies**

The Human Development and Family Studies minor is only available to non-HDFS majors; however, HDFS majors may choose to minor in Adolescent and Youth Development or Child Life (or a minor outside of the HDFS Department). The Child Life minor may also be taken by HDFS students interested in working with families and children in a hospital setting.

https://chhs.unh.edu/human-development-family-studies

Programs

- Adolescent and Youth Development (Minor) (p. 186)
- Child Life Minor (p. 186)
- Human Development and Family Studies Major: Child Development Option (B.S.) (p. 187)
- Human Development and Family Studies Major: Early Childhood Education Option (Teacher Licensure) (B.S.) (p. 188)
- Human Development and Family Studies Major: Family and Lifespan Development Option (B.S.) (p. 190)
- Human Development and Family Studies Minor (p. 192)

Faculty

Human Development and Family Studies Department Faculty

Adolescent and Youth Development (Minor)

https://www.unh.edu/program/minor/adolescent-youth-development

Description

The departments of Recreation Management and Policy and Human Development and Family Studies offer an interdisciplinary minor designed to give students an opportunity to develop knowledge and skills regarding adolescence and youth development. The two required courses offer a foundation in theory, research, and practice, and students choose three additional courses in order to better prepare students to work with this age group.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
RMP 668	Youth Culture and Programs	4
or RMP 768	Theories and Philosophies of Youth Development	
HDFS 624	Adolescent Development	4
Electives		
Select three courses from the below (approved by a minor advisor):		12
EDUC 556	Peer to Peer Mentoring for Students with Disabilities	2
HDFS 630W	Youth Facing Adversity	4
HPE 702	Health Content and Youth Risk Behavior	4
SW 704	Adolescents with Emotional and Behavioral Challenges	4
HDFS 707	Practicum	1-6
HDFS 776	Children, Adolescents and the Law	4
RMP 563	Recreation Management and Policy Practicum	3
RMP 560	Recreational Sport Management	4
SOC 525	Juvenile Crime and Delinquency	4
SML 565	Principles of Coaching	4
SW 705	Child and Adolescent Risks and Resiliency: Program, Policy and Practice	4

Other adolescent or youth-based courses as approved by minor coordinator.

Child Life Minor

https://www.unh.edu/program/minor/child-life

Description

The department of Human Development and Family Studies offers a minor in Child Life. The minor introduces undergraduate students to the Child Life profession, which works with children, adolescents, and families facing challenges associated with hospitalization, medical procedures, illness, and disability. You will gain insight on how to support children and their families to effectively cope with the stress and anxiety of hospitalization using developmental play and normalized activities in their environment.

For students who wish to go on to become Child Life Specialists, the full list of UNH approved courses by the Association of Child Life Professionals can be found under HDFS Undergraduate Forms. Read more about ACLE certification.

The Child Life minor may also be taken by HDFS students.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
HDFS 565	Introduction to Child Life [2]	4
or SW 565	Introduction to Child Life	
HDFS 623	Infant and Child Development [2]	4
Select three courses from the following:		12
HDFS 590	Learning Through Play [2]	

HDFS 624	Adolescent Development	
HDFS 635	Teaching and Learning in Early Childhood Settings [2]	
HDFS 641	Parenting Across the Life Span [2]	
HDFS 684	Curriculum for Young Children [2]	
HDFS 697	Special Topics (Child Life Design and Programing)	
HDFS 707	Practicum [1]	
HDFS 709	Child Development Internship [2]	
NURS 535	Death and Dying [2]	
Total Credits		**20**

1 Internship under the supervision of a CCLS. Contingent on approval from instructor and securing an internship site.

2 Approved Child Life Certification course. These courses meet the Association of Child Life Professionals requirements to sit for the Exam. Note: Course work is only part of the ACLP requirements. Please visit the ACLP website for complete information.

Human Development and Family Studies Major: Child Development Option (B.S.)

https://www.unh.edu/program/bachelor-science/human-development-family-studies-child-development

Description

Human Development and Family Studies (HDFS) is an academic discipline focused on understanding the development of individuals and families over time and across the ecological contexts in which they live. The Child Development option within the major is applied and versatile, preparing students for in-demand careers focused on enhancing child and family well-being in settings that include childcare centers, hospitals, schools, and social service agencies. The Child Development curriculum offers students the opportunity to take courses on infant and child development, youth facing risk, teaching and learning, observation and assessment of children, learning through play, parent-child relationships, and more. Coursework emphasizes diverse experiences across gender, race and ethnicity, nationality, socioeconomic status, and family structure to prepare students for inclusive programming and practice.

As a major public research university, UNH emphasizes hands-on experience and research opportunities for undergraduate students. Students within the HDFS Child Development option are provided with opportunities to put theory and research into practice through practicum coursework at the Child Study and Development Center and through an optional senior year internship experience at one of the many community-based organizations that support children and families in the Seacoast region of New Hampshire.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The core curriculum required of each Human Development and Family Studies student is designed to give a broad introduction to individual and family development and interpersonal relationships across the lifespan. Building off this curriculum, each student can specialize in one of three options, Child Development, Early Child Education Teacher Licensure, or Family and Lifespan Development which guide further required coursework. Faculty advisors support students in selecting coursework to best prepare them for their specific career objectives. In their senior year, students complete a capstone course and may participate in a year-long community-based internship experience.

Candidates for the Human Development and Family Studies degree must satisfy all of the University Discovery and Writing Program requirements in addition to satisfying the requirements of the major/option.

Code	Title	Credits
Core Requirements		
HDFS 525	Human Development	4
HDFS 545	Intimate Relationships and Families	4
HDFS 555	Research Methods in HDFS	4
Child Development Option Requirements		
HDFS 623	Infant and Child Development	4
HDFS 630W	Youth Facing Adversity	4
HDFS 635	Teaching and Learning in Early Childhood Settings	4
HDFS 771	Observation and Assessment of Young Children	4
Select three elective development in context courses from the following:		12
HDFS 684	Curriculum for Young Children	
HDFS 794	Families and the Law	
HDFS 641	Parenting Across the Life Span	
HDFS 590	Learning Through Play	
HDFS 565	Introduction to Child Life	
HDFS 709	Child Development Internship	
Supporting Courses		
Supporting courses are intended to provide an individualized component to the HDFS curriculum. Because HDFS is interdisciplinary, this allows students to explore related areas that contribute to their academic and professional goals. The 16-credit hour HDFS community internship will satisfy the supporting coursework requirement. For students not completing the internship, at least 4 of their supporting course credits must come from within HDFS. The remaining 12 credits of supporting coursework can include additional courses within HDFS or outside of HDFS as long as those taken outside of HDFS are:		16
1. At the 500-level or above		
2. Approved by an HDFS advisor		
Classes outside of HDFS meeting supporting course criteria are often found in the psychology, sociology, social work, women's and gender studies, education, and communication sciences and disorders departments.		
Capstone		
HDFS 743	Families, Schools, and Community	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
HDFS 525 or HDFS 545	Human Development [1] or Intimate Relationships and Families	4
Discovery Course		4
Discovery Course		4
CHHS First Year Seminar		1
	Credits	**17**
Spring		
HDFS 525 or HDFS 545	Human Development [1] or Intimate Relationships and Families	4
HDFS 555	Research Methods in HDFS	4
Discovery Course		4
Inquiry Course		4
CHHS First Year Seminar		1
	Credits	**17**
Second Year		
Fall		
HDFS 623	Infant and Child Development	4
Discovery Course		4
Discovery Course		4
Course selected in consultation with advisor [3]		4
	Credits	**16**
Spring		
HDFS 635	Teaching and Learning in Early Childhood Settings	4
CD Elective [2]		4
Discovery Course		4
Course selected in consultation with advisor [3]		4
	Credits	**16**
Third Year		
Fall		
HDFS 635 or HDFS 630W	Teaching and Learning in Early Childhood Settings [1] or Youth Facing Adversity	4
HDFS 771	Observation and Assessment of Young Children (or CD Elective) [1,2]	4
CD Elective [2]		4
Course selected in consultation with advisor [3]		4
	Credits	**16**
Spring		
HDFS 771	Observation and Assessment of Young Children (or CD Elective) [1]	4
Discovery Course		4
Discovery Course		4
Course selected in consultation with advisor [3]		4
	Credits	**16**
Fourth Year		
Fall		
HDFS 743	Families, Schools, and Community (Capstone (or course selected in consultation with advisor)) [1,3]	4
Major Supporting Course		4
Major Supporting Course		4
Course selected in consultation with advisor [3]		4
	Credits	**16**
Spring		
HDFS 743	Families, Schools, and Community (Capstone (or course selected in consultation with advisor)) [1,3]	4
Major Supporting Course [4]		4
Major Supporting Course [4]		4
Course selected in consultation with advisor [3]		4
	Credits	**16**
	Total Credits	**130**

1. Students should enroll in each listed course only once.
2. CD electives refer to development and context courses.
3. Students should use these credit hours towards a dual/double major, minor, accelerated master's program (senior year if applicable), or as general elective coursework.
4. Students should consult their advisor to determine if a course outside of HDFS meets the supporting course requirements. The Community Internship satisfies supporting course requirements. Students who do not complete the internship must earn at least four supporting course credits within HDFS.

Student Learning Outcomes

Program Learning Outcomes

- Use theoretical frameworks and empirical research to understand and explain child development, family process and the interaction of children and families with society.
- Recognize and respect a diversity of family forms and processes. Understand how child development and family interactions are shaped by diverse personal contexts and cultures. Understand and be aware of one's own biases, beliefs, and values.
- Understand ethical decision-making processes, and ethical standards and principles relevant to our discipline. Positively represent the profession in academic, professional and community settings.

Human Development and Family Studies Major: Early Childhood Education Option (Teacher Licensure) (B.S.)

https://www.unh.edu/program/bachelor-science/human-development-family-studies-early-childhood-education-teacher-licensure

Description

Human Development and Family Studies (HDFS) is an academic discipline focused on understanding the development of individuals and families over time and across the ecological contexts in which they live. The Early Childhood Education (ECE) Teacher Licensure option within the major provides an applied focus on preparing students for careers as early childhood (birth - third grade) educators in childcare

centers, preschools, and elementary schools. The ECE Teacher Licensure curriculum offers students the opportunity to take courses on infant and child development, working with children with special needs, teaching and learning in early care and education settings, observation and assessment of children, and building strong family-school-community partnerships. Additionally, students take subject-area coursework focused on developing the skills needed to teach math, science, social studies, and literacy. The principles of equity, diversity, and inclusion are woven throughout every course and internship experience to prepare students for inclusive educational practice.

As a major public research university, UNH emphasizes hands-on experience and research opportunities for undergraduate students. Students within the HDFS Early Childhood Education Teacher Licensure option are provided with opportunities to put theory and research into practice through practicum and internship coursework at the Child Study and Development Center and a required full-year student teaching internship in a Kindergarten through 3rd-grade classroom.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The core curriculum required of each Human Development and Family Studies student is designed to give a broad introduction to individual and family development and interpersonal relationships across the lifespan. Building off this curriculum, each student can specialize in one of three options, Child Development, Early Childhood Education Teacher Licensure, or Family and Lifespan Development which guide further required coursework. Faculty advisors support students in selecting coursework to best prepare them for their specific career objectives. In their senior year, students complete a capstone course and may participate in a year-long community-based internship experience.

Candidates for the Human Development and Family Studies degree must satisfy all of the University Discovery and Writing Program requirements in addition to satisfying the requirements of the major/option.

Code	Title	Credits
Core Requirements		
HDFS 525	Human Development	4
HDFS 545	Intimate Relationships and Families	4
HDFS 555	Research Methods in HDFS	4
Early Childhood Education: Teacher Licensure Option Requirements		
HDFS 623	Infant and Child Development	4
HDFS 635	Teaching and Learning in Early Childhood Settings	4
HDFS 684	Curriculum for Young Children	4
HDFS 709	Child Development Internship	4
HDFS 771	Observation and Assessment of Young Children	4
HDFS 785	Seminar for Student Teachers I	2
HDFS 786	Seminar for Student Teachers II	2
HDFS 788	Student Teaching Young Children	8
EDUC 500	Exploring Teaching	4
EDUC 706	Teaching & Learning Literacy in the Elementary Classroom	4
EDUC 751A or EDUC 760	Inclusive Elementary Education: Literacies and Learning for Diverse Learners Introduction to Young Children with Special Needs	4
EDUC 703F	Teaching Elementary School Science	4
EDUC 703M	Teaching Elementary Social Studies	4
MATH 601	Exploring Mathematics for Teachers I	4
MATH 703	Teaching of Mathematics in Grades K-6	4
Capstone		
HDFS 743	Families, Schools, and Community	4

Additional Information

Teacher Licensure Option Requirements

- Students must meet state student-teaching requirements including completing the Basic Academic Skills Assessment (BASA) and a criminal background check.
- Students must have a minimum 3.2 overall and major GPA and meet course progression requirements (B- or better in all Early Childhood Education: Teacher Licensure Option Requirements) confirmed through application during the spring of the junior year. Students not meeting these requirements will be transitioned to the Child Development option.
- Graduates of the Early Childhood Education Teacher Licensure option will be eligible for recommendation to the NH Department of Education for Early Childhood Education (N-3) licensure.
- Licensure by the NH Department of Education also depends on meeting state subject area testing requirements and a criminal background check.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
HDFS 525 or HDFS 545	Human Development [1] or Intimate Relationships and Families	4
Discovery Course		4
Discovery Course		4
CHHS First Year Seminar		1
	Credits	**17**
Spring		
HDFS 525 or HDFS 545	Human Development [1] or Intimate Relationships and Families	4
HDFS 555	Research Methods in HDFS	4
Discovery Course		4
Inquiry Course		4
CHHS First Year Seminar		1
	Credits	**17**
Second Year		
Fall		
HDFS 623	Infant and Child Development	4

EDUC 500	Exploring Teaching (or Discovery Course) [1]	4
Discovery Course		4
Course selected in consultation with advisor [2]		4
	Credits	**16**
Spring		
HDFS 635	Teaching and Learning in Early Childhood Settings	4
MATH 601	Exploring Mathematics for Teachers I	4
EDUC 500	Exploring Teaching (or Discovery Course)	4
HDFS 684	Curriculum for Young Children (or Discovery Course)	4
	Credits	**16**
Third Year		
Fall		
HDFS 709 or HDFS 771	Child Development Internship (or Discovery Course) [1] or Observation and Assessment of Young Children	4
HDFS 684	Curriculum for Young Children (or Discovery Course)	4
Major/Option Course (MATH/EDUC)		4
Major/Option Course (MATH/EDUC)		4
	Credits	**16**
Spring		
HDFS 771 or HDFS 709	Observation and Assessment of Young Children [1] or Child Development Internship	4
Discovery Course		4
Discovery Course		4
Course selected in consultation with advisor [2]		4
	Credits	**16**
Fourth Year		
Fall		
HDFS 743	Families, Schools, and Community (Capstone)	4
HDFS 785	Seminar for Student Teachers I	2
Major/Option Course (MATH/EDUC)		4
Major/Option Course (MATH/EDUC)		4
Course selected in consultation with advisor [2]		4
	Credits	**18**
Spring		
HDFS 786	Seminar for Student Teachers II	2
HDFS 788	Student Teaching Young Children	8
Major/Option Course (MATH/EDUC)		4
	Credits	**14**
	Total Credits	**130**

1 Students should enroll in each listed course only once.

2 Students may use these credit hours towards a minor, accelerated master's program (senior year if applicable), or as general elective coursework.

Student Learning Outcomes

Program Learning Outcomes

- Use theoretical frameworks and empirical research to understand and explain child/lifespan development, family process and the interaction of individuals and families with society.
- Recognize and respect a diversity of family forms and processes. Understand how human development and family interactions are shaped by diverse personal contexts and cultures. Understand and be aware of one's own biases, beliefs, and values.
- Understand ethical decision-making processes, and ethical standards and principles relevant to our discipline. Positively represent the profession in academic, professional and community settings.

Disclosures

Human Development and Family Studies Major: Early Childhood Education Teacher Licensure Option (B.S.)

Location/Delivery: College of Health and Human Services, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Early Childhood Education (Pre K-3)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

1 State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Human Development and Family Studies Major: Family and Lifespan Development Option (B.S.)

https://www.unh.edu/program/bachelor-science/human-development-family-studies-family-lifespan-development

Description

Human Development and Family Studies (HDFS) is an academic discipline focused on understanding the development of individuals and families over time and across the ecological contexts in which they live. HDFS is an applied field of study and a versatile undergraduate major for students interested in working to enhance the lives of individuals and families through in-demand careers in settings that include early childhood education, schools, hospitals, and social service agencies. The HDFS curriculum offers students the opportunity to take courses from child and adolescent development to adult development and aging; family, parenting, and interpersonal relationships; classroom curriculum, observation, and assessment; and family programming, policy, and law. Courses in the HDFS major emphasize diverse experiences across age, gender, race and ethnicity, nationality, and socioeconomic status and prepare students for inclusive programming and practice.

As a major public research university, UNH emphasizes hands-on experience and research opportunities for undergraduate students. Students in the Human Development and Family Studies program are provided with opportunities to put theory and research into practice through practicum and internship courses in the Child Study and Development Center, and many schools and community-based organizations across the Seacoast region of New Hampshire.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The core curriculum required of each Human Development and Family Studies student is designed to give a broad introduction to individual and family development and interpersonal relationships across the lifespan. Building off this curriculum, each student can specialize in one of three options, Child Development, Early Child Education Teacher Licensure, or Family and Lifespan Development which guide further required coursework. Faculty advisors support students in selecting coursework to best prepare them for their specific career objectives. In their senior year, students complete a capstone course and may participate in a year-long community-based internship experience.

Candidates for the Human Development and Family Studies degree must satisfy all of the University Discovery and Writing Program requirements in addition to satisfying the requirements of the major/option.

Code	Title	Credits
Core Requirements		
HDFS 525	Human Development	4
HDFS 545	Intimate Relationships and Families	4
HDFS 555	Research Methods in HDFS	4
Family and Lifespan Development Option Requirements		
HDFS 641	Parenting Across the Life Span	4
HDFS 746	Human Sexuality	4
Select two development courses from the following:		8
HDFS 623	Infant and Child Development	
HDFS 624	Adolescent Development	
HDFS 625	Adult Development	
Select three family services and institutions elective courses from the following:		12
HDFS 586	Families at Risk	
HDFS 553	Personal and Family Finance for Family Life Professionals	
HDFS 610	Introduction to Marriage and Family Therapy	
HDFS 760	Family Programs and Policies	
HDFS 794	Families and the Law	
Supporting Courses		
Supporting courses are intended to provide an individualized component to the HDFS curriculum. Because HDFS is interdisciplinary, this allows students to explore related areas that contribute to their academic and professional goals. The 16-credit hour HDFS Community Internship will satisfy the supporting coursework requirement. For students not completing the Community Internship, at least 4 of their supporting course credits must come from within HDFS. The remaining 12 credits of supporting coursework can include additional courses within HDFS or outside of HDFS as long as those taken outside of HDFS are:		16
1. At the 500-level or above		
2. Approved by an HDFS advisor		
Classes outside of HDFS meeting supporting course criteria are often found in the psychology, sociology, social work, women's studies, education, and communication sciences and disorders departments.		
Capstone [1]		
HDFS 757	Race, Class, Gender, and Families	4
or HDFS 743	Families, Schools, and Community	

[1] Family and Lifespan Development students take HDFS 757 as the capstone course. With permission, a Family and Lifespan Development student may take HDFS 743 as the capstone course.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
HDFS 525 or HDFS 545	Human Development [1] or Intimate Relationships and Families	4
Discovery Course		4
Discovery Course		4
CHHS First Year Seminar		1
	Credits	**17**
Spring		
HDFS 525 or HDFS 545	Human Development [1] or Intimate Relationships and Families	4
HDFS 555	Research Methods in HDFS	4
Discovery Course		4
Inquiry Course		4
CHHS First Year Seminar		1
	Credits	**17**
Second Year		
Fall		
Development Course [2]		4

HDFS 641	Parenting Across the Life Span (or course selected in consultation with advisor) [1,3]	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
HDFS 641	Parenting Across the Life Span (or course selected in consultation with advisor) [1,3]	4
Development Course [2]		4
FLD Elective [4]		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
HDFS 746	Human Sexuality (or course selected in consultation with advisor) [3]	4
FLD Elective [4]		4
FLD Elective [4]		4
Course selected in consultation with advisor [3]		4
	Credits	**16**
Spring		
HDFS 746	Human Sexuality (or course selected in consultation with advisor) [3]	4
Discovery Course		4
Discovery Course		4
Course selected in consultation with advisor [3]		4
	Credits	**16**
Fourth Year		
Fall		
HDFS 757	Race, Class, Gender, and Families (Capstone (or course selected in consultation with advisor)) [1,3]	4
Major Supporting Course [5]		4
Major Supporting Course [5]		4
Course selected in consultation with advisor [3]		4
	Credits	**16**
Spring		
HDFS 757	Race, Class, Gender, and Families (Capstone (or course selected in consultation with advisor)) [1,3]	4
Major Supporting Course [5]		4
Major Supporting Course [5]		4
Course selected in consultation with advisor [3]		4
	Credits	**16**
	Total Credits	**130**

1. Students should enroll in each listed course only once.
2. Refers to development courses.
3. Students should use these credit hours towards a dual/double major, minor, accelerated master's program (senior year if applicable), or as general elective coursework.
4. FLD Electives refer to 'Family Services & Institutions' courses.
5. Students should consult their advisor to determine if a course outside of HDFS meets the supporting course requirements. The Community Internship satisfies supporting course requirements. Students who do not complete the internship must earn at least four supporting course credits within HDFS.

Student Learning Outcomes

Program Learning Outcomes

- Use theoretical frameworks and empirical research to understand and explain child/lifespan development, family process and the interaction of individuals and families with society.
- Recognize and respect a diversity of family forms and processes. Understand how human development and family interactions are shaped by diverse personal contexts and cultures. Understand and be aware of one's own biases, beliefs, and values.
- Understand ethical decision-making processes, and ethical standards and principles relevant to our discipline. Positively represent the profession in academic, professional and community settings.

Human Development and Family Studies Minor

https://www.unh.edu/program/minor/human-development-family-studies

Description

The Human Development and Family Studies minor complements undergraduate majors in the social sciences, health professions, and related disciplines by providing students with the opportunity to learn about individual and family development, interpersonal relationships, and the ecological contexts of development.

Requirements

Academic policies related to Minors.

Required Courses

Code	Title	Credits
HDFS 525	Human Development	4
HDFS 545	Intimate Relationships and Families	4
Any three additional HDFS courses		12
Total Credits		**20**

Kinesiology (KIN)

The mission of the Department of Kinesiology is to create, share, and apply knowledge in the promotion of health, physical activity, sport, and well-being. We achieve this through high quality teaching and mentoring of our students, conducting scholarly activity, and engaging in community outreach. Our programs purposefully blend theory, research, and practice to support the professional needs of our students in all stages of their careers.

The department offers four areas of study for majors: exercise science, health and physical education, health sciences and sport management and leadership. Candidates for degree requirements in any of the department majors must satisfy all University Discovery Program requirements in addition to satisfying specific program requirements.

https://chhs.unh.edu/kinesiology

Programs

- Applied Human Anatomy & Physiology (p. 168)
- Exercise Science (p. 171)
- Health and Physical Education (p. 172)
- Health Sciences (p. 183)
- Kinesiology (p. 193)
- Sport Analytics (p. 193)
- Sport Management and Leadership (p. 213)

Faculty

Kinesiology Department Faculty

Kinesiology Minor

https://www.unh.edu/program/minor/kinesiology

Description

The Department of Kinesiology offers an interdisciplinary curriculum for nonmajors, which is designed to provide students with the basic knowledge of human movement and sport sciences. The minor consists of courses offered by several options within the department.

Requirements

Academic policies related to Minors.

The designation of the completed minor will be "Kinesiology" which means students may create an emphasis in a particular area (i.e. Exercise Science, Health Sciences, Health and Physical Education, Sport Management and Leadership) or take classes from multiple areas in Kinesiology.

Minor Requirements

Credits towards the minor come from courses in EXSC, HPE, HS, KIN, and/or SML.

No more than 6 of the 20 credits may be in activity or coaching courses.

Sport Analytics (Minor)

Description

The **Sport Analytics Minor** provides students with an interdisciplinary foundation at the intersection of sport management and leadership, business analytics, and computer science. The minor equips students with the skills to collect, analyze, visualize and interpret sport-related data, and to translate those insights into practical strategies for decision-making in the sport industry and beyond.

Through coursework and applied projects, students will gain experience with statistical methods, data visualization, and analytic software such as Python. Emphasis is placed on both technical competency and the ability to communicate findings effectively to diverse audiences, preparing graduates to use data to address real-world challenges in sport organizations through data-driven insights.

Requirements

Academic policies related to Minors.

The minor requires students to complete five courses (20 credits) as outlined below.

- Students must earn a grade of C (2.0) or higher in all required and elective courses applied to the minor.
- All prerequisite courses must be successfully completed prior to enrolling in sequenced or advanced coursework.
- Students majoring in Sport Management & Leadership, Computer Science, and/or relevant majors in Paul College should be aware that only up to eight (8) credits can count towards both your major and this minor.

Code	Title	Credits
Required Courses		
SML 580	Sport Industry	4
SML 770	Sport Analytics [1]	4
or DS 620	Topics in Decision Sciences	
CS 410P	Introduction to Scientific Programming/Python	4
or CS 415	Introduction to Computer Science I	
or DS 662	Programming for Business	
Elective Courses		
Select two courses from the following:		8
CS 518	Introduction to Software Engineering	
CS 550	Foundations of Machine Learning	
CS 750	Machine Learning	
IT 630	Data Science and Scalable Data Systems	
ECON 676	Economics of Sports	
MKTG 763	Marketing Analytics	
DS 671	Data Visualization and Prescriptive Analytics	
DS 772	Predictive Analytics and Modeling	
DS 654	Sports Analytics Lab [2]	
Total Credits		**20**

1 ADMN 510 Business Analytics and Statistics MATH 439 Statistical Discovery for Everyone or MATH 539 Introduction to Statistical Analysis is a required pre-requisite to enter SML 770 Sport Analytics.

2 If DS 654 Sports Analytics Lab (2 Credits) is chosen, an additional approved 2-credit course must be taken to reach the 20-credit minimum for the minor.

Student Learning Outcomes

Sports Stats Gathering, Analysis, and Interpretation
- Collect, analyze, and interpret sport data using statistical and computational tools.

Sports Data Intelligence
- Create clear visualizations and reports to communicate analytic insights effectively.

Sports Analytics Competencies
- Apply analytics software and techniques in sport industry contexts.

Analytics Importance

- Understand the role of analytics across different domains of sport, including performance, marketing, and business operations.

Decision Making with Sports Data

- Integrate analytics findings into strategic decision-making within sport organizations.

Occupational Therapy (OT)

Occupational therapy enables individuals of all ages to engage in everyday activities in the areas of work, self-care, home management, school, and leisure/play. Occupational therapists support people to promote their participation in desired activities in natural contexts. This process often involves working on skill development or adapting tasks or an environment to optimize peoples' ability to fulfill their social roles and engage in activities that are meaningful and support health and well-being. A program of study in occupational therapy includes a foundation in the liberal arts; biological, behavioral, and health sciences; and discipline-specific studies in occupational science and occupational therapy.

The occupational therapy master's and doctoral degree programs at the University of New Hampshire are accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 7501 Wisconsin Avenue, Suite 510E, Bethesda, MD 20814. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its web address is www.acoteonline.org.

Graduates from an accredited program are eligible to sit for the certification examination for the occupational therapist, administered by the National Board for Certification in Occupational Therapy (NBCOT). After passing this exam, the individual will be a registered occupational therapist (OTR). All states require licensure in order to practice, however, state licenses are usually based on the results of the NBCOT certification examination. A felony conviction may affect a person's ability to sit for the NBCOT certification examination and obtain licensure.

https://chhs.unh.edu/occupational-therapy

Programs

- Disability Studies Minor (p. 194)
- Occupational Therapy Major (B.S.) (p. 195)

Faculty

Occupational Therapy Department Faculty

Disability Studies Minor

https://www.unh.edu/program/minor/disability-studies

Description

The minor in Disability Studies gives students the opportunity to explore the meaning, nature and consequences of disability from multiple perspectives. Ways of supporting people with disabilities and their families is addressed including the influences of disability policy, applications of technology, and societal and cultural attitudes and understanding related to persons with disability. This interdisciplinary program introduces topics such as exceptionality, the lived experience of disability and effects of stigma, disability policy, assistive technologies and universal design to enhance function and access, and health and human services for supporting individuals with disability. Students select from a wide range of electives to support their individual areas of interest. Students may expand career options by combining the minor in Disability Studies with majors such as Education, Occupational Therapy, Recreation Management and Policy, Psychology, Human Development and Family Studies, Communication Sciences and Disorders, Kinesiology, and Social Work.

When you minor in Disability Studies at UNH, depending on how you design your program and your course selection, you may work collaboratively with faculty from the Departments of Occupational Therapy, Recreation Management and Policy, Communication Sciences and Disorders, Social Work, Nutrition, Kinesiology, Human Development and Family Studies, and Education. You'll also have the option of pursuing a faculty sponsored independent study or a small-scale research project.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Course		
One of the following courses is required from the student's major or any other disability related intensive course outside of the major with permission:		
OT 610	Occupation, Identity, Disability	4
OT 685	Psychosocial Disorders and Everyday Life	4
EDUC 650	Introduction to Disability in Inclusive Schools and Communities [2]	4
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4
SW 712	Understanding Developmental Disabilities	4
Electives		
Select 16 credits from the course list below. Note that any of the courses in the required course list above may be used as an elective course if not taken as the required course		
OT 444	Living and Doing with Technology	4
INTR 438	A Socio-cultural Perspective on the Deaf Community	4
NUTR 740	Nutrition for Children with Special Needs	4
OT 730	Assistive Technology for Enhancing Occupational Performance	3
OT 733	Assistive Technology for Physical Access I: Electronic Technologies	2
OT 734	Assistive Technology for Physical Access II: Mobility, Seating, and Transportation	2
OT 735	Assistive Technology for Communication and Cognition	2
OT 736	Assistive Technology for Vision and Hearing	2
OT 520	Happy and Healthy at Work: Promoting Wellness, Diversity and Inclusion	4
HMGT 520		4
EDUC 760	Introduction to Young Children with Special Needs	4
RMP 444A	Taking the "Dis" out of Disability	4
RMP 720	Adaptive Sport Facilitation for Recreation Therapy and Related Professions	4
SW 704	Adolescents with Emotional and Behavioral Challenges	4
HPE 781	Introduction to Adapted Physical Education	4
SW, OT, EDUC, KIN, NUTR, RMP Independent Study with a disability focus [1]		

1. The purpose of the independent study is to explore a topic that provides a detailed focus on an important issue related to individuals with disabilities. A student may also choose to engage in a small-scale research project to investigate an issue that affects individuals with disabilities. Each project will be negotiated with the student's departmental faculty adviser and the coordinator of the minor program.
2. Prerequisite courses EDUC 500 Exploring Teaching and EDUC 402 Introduction to Educational Studies: Social Change and Education in Local and Global Contexts are waived with permission for students in non-education majors.

Occupational Therapy Major (B.S.)

https://www.unh.edu/program/bachelor-science/occupational-therapy

Description

Bachelor of Science (BS) to Advanced Standing MS or OTD Degree

The combined BS/MS or BS/OTD program allows students to complete a bachelor's degree at UNH and smoothly transition into an entry-level OT graduate program (Master of Science (MS) or Clinical Doctorate (OTD). To practice as an Occupational Therapist (OT) in the U.S., you need an MS or an OTD from an ACOTE-accredited program. Our BS in OT curriculum provides a strong foundation in the liberal arts, biological, behavioral and health sciences for the first three years. Courses in the final undergraduate year transition students into the OT-specific content, with select courses counting toward UNH MS or OTD requirements. This advanced standing structure allows students to save one full year compared to traditional, non-combined programs. The combined BS/MS degree program is completed in five years. The combined BS/OTD degree program is completed in 6 years with two summer terms.

This program is offered in-person at the Durham campus.

The occupational therapy master's and doctoral programs are accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) located at 7501 Wisconsin Ave. Suite 510E, Bethesda, MD 20814. ACOTE's telephone number c/o AOTA is Tel. (301)- 652-AOTA and its Website: https://acoteonline.org/

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students begin the BS curriculum with preprofessional courses, which include courses in biological and social sciences as well as occupational therapy. In addition to meeting the University Discovery Program requirements, students take the following courses during the first three years of the program.

Code	Title	Credits
Core Curriculum		
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
OT 500	Behavior and Development of Children	4
OT 501	Developmental Tasks of Adulthood	4
OT 510	Exploring Occupational Therapy and Occupation	4
OT 610	Occupation, Identity, Disability [1]	4
OT 620	Medical Terminology	2
OT 685	Psychosocial Disorders and Everyday Life	4
KIN 652	Clinical Kinesiology	4
KIN 706 & KIN 707	Neurology and Neurology Lab	6
PSYC 401	Introduction to Psychology	4
Select one statistics course from the following:		4
PSYC 402	Statistics in Psychology	
HMP 540	Statistics for Health and Human Service Professionals	
SOC 402	Statistics	
Select one health or social policy course from the following:		4
HDFS 760	Family Programs and Policies	
HDFS 776	Children, Adolescents and the Law	
HDFS 794	Families and the Law	
HMP 401	United States Health Care Systems	
HMP 403	Introduction to Public Health	
HMP 744	Law and Ethics in Healthcare	
HMP 746	Health Policy	
POLT 500	American Public Policy	
RMP 663	Financial Management in Recreation Services	
SW 525	Social Welfare Policy: History of Social and Economic Justice	
SW 705	Child and Adolescent Risks and Resiliency: Program, Policy and Practice	

Details on satisfying these requirements are provided by the student's academic adviser and are outlined in the *OT Department Policy and Procedure Manual*. All students receive an electronic copy of the manual in their first year, and it is also available on the Occupational Therapy Student Resources site on the University learning platform.

Volunteer or work experience in a health and human service organization is recommended, although not required.

Professional Curriculum

Students with a GPA of 3.0 or higher who will apply to enter the Advanced Standing MS or Advanced Standing OTD programs take the following professional level courses during their undergraduate education.

Code	Title	Credits
Required Courses BS-MS and BS-OTD		
OT 710	OT Practice and Professional Roles	3
OT 741	Human Occupation [1]	4
OT 744	Fieldwork and Professionalism - Level 1	1
OT 751	Mind Body Systems/Neurologically Based Function and Dysfunction	4
OT 752 & 752L	Human Movement and Environmental Effects on Everyday Occupations and Human Movement Lab	4
OT 763 & 763L & 763R	Occupational Therapy Evaluation and Intervention for Adults and Occupational Therapy Evaluation and Intervention for Adults Lab and Occupational Therapy Evaluation and Intervention for Adults Recitation	4
OT 781	Introduction to Research and Evidence-Based Practice	3
OT 782	Research Methods and Application (Capstone)	3
OT 792	Level I Fieldwork	1
OT 760 & 760L & 760R	Psychosocial Evaluation and Intervention and Psychosocial Evaluation and Intervention Lab and Psychosocial Evaluation & Intervention Recitation	4
OT 762 & 762L & 762R	Occupational Therapy Evaluation and Intervention for Children and Occupational Therapy Evaluation and Intervention for Children Lab and Occupational Therapy Evaluation and Intervention for Children Recitation	4

[1] This course also fulfills the writing intensive in major course.

Students need to declare their choice for Advanced Standing MS or OTD by the end of their sophomore year. At the end of the senior year, students are awarded a Bachelor of Science Degree in Occupational Therapy. However, students must earn a graduate degree (MS or OTD) to become registered occupational therapists. Students apply to the Graduate School for Occupational Therapy: Advanced Standing MS or the

OTD Program during their senior year. An overall minimum grade point of 3.0 is required for admission to the MS Program or OTD program, and students must earn a minimum grade of B- in all OT classes at the 700 level, with no more than 8 credits of B- in OT courses at the 700 level, pass Level I Fieldwork, and meet professional behavior expectations. Please refer to the Graduate Catalog for additional information about the Advanced Standing MS and OTD Programs and the graduate portion of the professional occupational therapy curriculum including Fieldwork Level II requirements.

Students are responsible for transportation to off-campus practicum and fieldwork locations.

Curriculum review and revision is undertaken annually. The department works closely with students during academic advising sessions and shares information about any policy and requirement changes during registration periods as well as throughout the academic year. Students also are expected to take an active role in verifying expectations and should check with their academic adviser each September for updated policies and requirements. Program requirements and policies for retention in the major are in the *OT Department Policy and Procedure Manual*, which is available online.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
OT 510	Exploring Occupational Therapy and Occupation	4
BMS 507	Human Anatomy and Physiology I	4
ENGL 401	First-Year Writing	4
Discovery or Inquiry Course		4
	Credits	**16**
Spring		
OT 500	Behavior and Development of Children	4
PSYC 401	Introduction to Psychology	4
BMS 508	Human Anatomy and Physiology II	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
OT 501	Developmental Tasks of Adulthood	4
OT 610	Occupation, Identity, Disability	4
Health Policy course		4
HMP 540	Statistics for Health and Human Service Professionals	4
	Credits	**16**
Spring		
KIN 652	Clinical Kinesiology	4
OT 685	Psychosocial Disorders and Everyday Life	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
KIN 706 & KIN 707	Neurology and Neurology Lab	6
OT 620	Medical Terminology	2
OT 710	OT Practice and Professional Roles	3
OT 741	Human Occupation	4
	Credits	**15**
Spring		
OT 752 & 752L	Human Movement and Environmental Effects on Everyday Occupations and Human Movement Lab	4
OT 744	Fieldwork and Professionalism - Level 1	1
OT 792	Level I Fieldwork	1
Discovery, Minor, or Elective Course		4
Discovery, Minor, or Elective Course		4
Discovery, Minor, or Elective Course		4
	Credits	**18**
Fourth Year		
Fall		
OT 781	Introduction to Research and Evidence-Based Practice	3
OT 751	Mind Body Systems/Neurologically Based Function and Dysfunction	4
OT 760 & 760L & 760R	Psychosocial Evaluation and Intervention and Psychosocial Evaluation and Intervention Lab and Psychosocial Evaluation & Intervention Recitation	4
Discovery, Minor, or Elective Course		4
Discovery, Minor, or Elective Course		4
	Credits	**19**
Spring		
OT 750	Neuro-Occupation: The Relationship Between Occupation and the Brain (or elective)	3
OT 762 & 762L & 762R	Occupational Therapy Evaluation and Intervention for Children and Occupational Therapy Evaluation and Intervention for Children Lab and Occupational Therapy Evaluation and Intervention for Children Recitation	4
OT 763 & 763L & 763R	Occupational Therapy Evaluation and Intervention for Adults and Occupational Therapy Evaluation and Intervention for Adults Lab and Occupational Therapy Evaluation and Intervention for Adults Recitation	4
OT 782	Research Methods and Application (Capstone)	3
	Credits	**14**
	Total Credits	**130**

Student Learning Outcomes

Program Learning Outcomes

Upon graduation with a BS in OT degree from UNH, students will:

- Critically evaluate biological, psychosocial, and educational theories that influence human behavior and occupational participation.
- Demonstrate an understanding of the value of human occupation in health and wellness.
- Demonstrate critical appraisal of how disease and disability influences health promotion and occupational well-being.
- Recognize the role of culture, socioeconomic status, abilities, and other factors on occupational performance and participation of all members of society.
- Demonstrate an understanding of concepts of occupational deprivation and occupational justice as related to health and well-being for all people.
- Demonstrate competency in information and basic research literacy.
- Demonstrate professional behaviors and skills in written and oral communication.
- Be prepared to apply for graduate study in the field of occupational therapy or other disciplinary area of graduate study.

Recreation Management and Policy (RMP)

Recreation services improve public health and wellness, promote sustainable environments, develop a sense of community, and enhance the quality of life of all citizens. Recreation professionals experience high quality of life and earn competitive salaries as they pursue meaningful work in diverse settings, including human services agencies, commercial businesses, resorts, health care providers, and natural environments such as parks, wilderness areas, and outdoor programs. Economic and workforce projections indicate that recreation service industries will continue to expand and provide numerous professional career opportunities.

The Department of Recreation Management and Policy has been a leader in recreation research and education for over 50 years. Our programs are nationally accredited by the Council on Accreditation of Parks, Recreation, Tourism, and Related Professions (COAPRT), the Association for Experiential Education (AEE), and the Committee on Accreditation of Recreational Therapy Education (CARTE) – an accreditation program under the Commission on Accreditation of Allied Health Education Programs (CAAHEP). The Department's curriculum supports a broad-based education and an opportunity to acquire specialized professional knowledge and skills in event and tourism management, community well-being and inclusion, and outdoor resource and program management.

Curriculum Structure

Students entering the major may choose an option in Tourism and Event Management ("TEM") or Outdoor Leadership and Management ("OLM"). Each curriculum consists of a professional core, required option courses, and electives. Candidates for a degree in Recreation Management and Policy must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major option.

Professional Internship

A supervised internship (RMP 764 Internship) is required of all majors and serves as their **major capstone requirement**. The internship is designed to create a bridge between theory and practical application. Students, working with their advisers and the internship coordinator, select an appropriate setting based on their professional and career interests. They must register for an 8 or 12 credit full-time internship that ranges from 10 to 16 weeks under the supervision of a qualified professional. Specific requirements are identified in the *Internship Manual* available from the Department office.

Declaring a Major

First-year students entering UNH who wish to apply to the Bachelor of Science (B.S.) program in Recreation Management and Policy should contact the Office of Admissions. The admissions web site contains complete campus visit information and an online visitor registration. It also contains admission criteria and important dates, as well as an online application form.

How to apply for students transferring from within UNH

Outdoor Leadership and Management: UNH's outdoor leadership and management program prepares students for dynamic careers in outdoor education, adventure programming, outdoor recreation management, parks and protected areas management, youth and after-school programming, and conservation. Our curriculum combines experiential learning in diverse outdoor settings with a classic liberal arts education. Students gain a solid foundation in the theories, philosophies and methods of outdoor recreation leadership and management while gaining skills in activities such as climbing, canoeing and backpacking. To change your major to OLM, complete the online change of major form. OLM applications are accepted throughout the year and decisions are made on a rolling admission basis. If you have questions about the program and event management option, please contact Nate Fitch (nate.fitch@unh.edu).

Tourism and Event Management: This option equips students with an entrepreneurial mindset and prepares students for career-track positions in tourism and event management organizations, emphasizing planning, leadership, and administrative concepts. Students learn to apply skills in settings such as destination marketing and management firms, resorts, residential facilities, community development agencies, and festival and event businesses. To change your major to TEM, complete the online change of major form. TEM applications are accepted throughout the year and decisions are made on a rolling admission basis. If you have questions about the program and event management option, please contact Sean McLaughlin (sean.mclaughlin@unh.edu).

https://chhs.unh.edu/recreation-management-policy

Programs

- Outdoor Adventure Recreation Minor (p. 198)
- Recreation Management and Policy Major: Outdoor Leadership and Management Option (B.S) (p. 198)
- Recreation Management and Policy Major: Therapeutic Recreation Option (B.S.) (p. 200)
- Recreation Management and Policy Major: Tourism and Event Management Option (B.S.) (p. 202)

- Recreation Management Minor (p. 204)
- Ski Resort Management Cognate (p. 204)
- Therapeutic Recreation Minor (p. 205)
- Tourism Minor (p. 206)

Faculty

Recreation Management & Policy Department Faculty

Outdoor Adventure Recreation Minor

https://www.unh.edu/program/minor/outdoor-adventure-recreation

Description

The purpose of the minor in Outdoor Adventure Recreation is to complement major courses of study that prepare students for professional fields that work in outdoor environments across human service, natural resources, educational, or recreation sectors. It will provide an orientation to the technical, risk management, and leadership skills required for personal preparedness and program organization involving backcountry and facilities-based adventure activities. In addition, the minor seeks to improve the standards for fieldwork in professional fields that use the outdoors by offering high-quality training that employs current risk management principles that govern engagement in outdoor activities.

Program Objectives:

- Provide the highest quality professional preparation in outdoor technical skills
- Surpass national standards so students can pursue certifications if desired
- Cultivate life-long learners who are motivated to seek continuous improvement
- Improve quality and help to reduce risks across professional fields that depend on a common skillset
- Expand participation in outdoor activities both on campus and in public and private sectors
- Enhance the experiences of future participants by emphasizing best practices that validate a range of life experiences, identities, and goals

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required courses		
OUT/RMP 515	History of Outdoor Pursuits in North America	4
or RMP 511	Issues of Wilderness and Nature in American Society	
OUT 549	Wilderness Navigation	4
Select one course from the following:		4
OUT 540	Top Rope Rock Climbing	
OUT 551	Adventure Programming: Backcountry Based Experience	
OUT 552	Adventure Programming: Water Based Experiences	
Electives		
Select at least 8 credits from the following:		8
RMP 603	New Hampshire Ski Industry Management	
RMP 670	Venue Management Design & Operations	
RMP 711	Recreation Resource Management	
RMP 775	Entrepreneurial and Commercial Recreation	
RMP 776	Human Dimensions of Natural Environments	
OUT 539	Artificial Climbing Wall Management	
OUT 542	Sea Kayaking	
OUT 545	High Angle Rescue	
OUT 546	Whitewater Canoeing	
OUT 547	Lead Rock Climbing	
OUT 681	Foundations of Adventure Education	
LAP 514	Lifetime Activity Program: Wilderness First Aid (WFA)	
OUT 686	Wilderness Emergency Medical Care	
LAP 500 Level Course		
Total Credits		**20**

Recreation Management and Policy Major: Outdoor Leadership and Management Option (B.S)

https://www.unh.edu/program/bachelor-science/recreation-management-policy-outdoor-leadership-management

Description

UNH's Outdoor Leadership and Management (OLM) Program is designed for students who want to study and work in outdoor programs, parks, and public or commercial recreation settings. Our graduates are guides, leaders, directors, and managers of agencies that provide healthy outdoor activities for people across their lifespan. Our curriculum combines experiential learning in urban, rural, and backcountry landscapes with a classic liberal arts education. You'll gain a solid foundation in the theories, philosophies, and methods of outdoor recreation leadership and management while gaining skills in outdoor activities, pursuits or disciplines such as climbing, canoeing, and backpacking. This program will prepare you for dynamic careers in outdoor education, adventure programming, outdoor recreation management, parks and protected areas management, youth and after-school programming, conservation, and other outdoor fields.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

All majors must complete a core curriculum.

Code	Title	Credits
Core Requirements		
RMP 490	Recreation & Tourism in Society	4
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4
RMP 557	Program and Event Design	4

RMP 563	Recreation Management and Policy Practicum	3
RMP 654	Professional Development and Ethics	3
RMP 764	Internship (Capstone) [1]	8 or 12
Outdoor Leadership and Management Option Requirements		
RMP 411	Applied Recreation Risk Management	3
OUT 681	Foundations of Adventure Education	4
OUT 686	Wilderness Emergency Medical Care	4
RMP 711	Recreation Resource Management	4
RMP 772	Law and Public Policy in Leisure Services	4
RMP 776	Human Dimensions of Natural Environments	4
Leadership or Management Course		
Select one course from the following:		2-4
OUT 682	Experiential Teaching & Leadership	
RMP 641	Group Facilitation and Leadership	
RMP 670	Venue Management Design & Operations	
Field Leadership		
Select at least two courses from the following:		8
OUT 540	Top Rope Rock Climbing	
OUT 551	Adventure Programming: Backcountry Based Experience	
OUT 552	Adventure Programming: Water Based Experiences	
Electives [2,3]		
Select a minimum of 6 credits from the following:		6
Field Leadership course not selected above can be selected as an elective.		
Leadership or Management course not selected above can be selected as an elective.		
OUT 539	Artificial Climbing Wall Management	
OUT 541	Technical Operation of Aerial Adventure Courses	
OUT 542	Sea Kayaking	
OUT 545	High Angle Rescue	
OUT 546	Whitewater Canoeing	
OUT 547	Lead Rock Climbing	
OUT 549	Wilderness Navigation	
RMP 603	New Hampshire Ski Industry Management	
RMP 663	Financial Management in Recreation Services	
RMP 668	Youth Culture and Programs	
RMP 775	Entrepreneurial and Commercial Recreation	
Lifetime Activity Program (LAP) Course		
Select two LAP courses with outdoor discipline:		4
LAP 501	Lifetime Activity Program: Special Topics	
Total Credits		**69-75**

1. Professional Internship: a supervised internship is required of all majors and serves as the major capstone requirement. The internship is designed to create a bridge between theory and practical application. Students, working with their advisors and the internship coordinator, select an appropriate setting based on their professional and career interests. Students must register for an 8 credit (10-week, 400 hour) or 12 credit (14-week, 560 hour) internship that is under the supervision of a qualified professional. Specific requirements are identified in the *Internship Manual* available from the Department of Recreation Management and Policy.
2. Other courses may be recommended by the academic advisor to fulfill the elective requirement.
3. RMP students enrolled in an accelerated masters program offered by the Carsey School of Public Policy may count any Carsey graduate course as an elective toward their undergraduate RMP degree.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
RMP 490	Recreation & Tourism in Society	4
RMP 411	Applied Recreation Risk Management	3
HHS 401	College of Health and Human Services Seminar	1
OUT Field Course		4
OLM Elective or LAP Elective		2
Discovery Course		4
	Credits	**18**
Spring		
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4
ENGL 401	First-Year Writing	4
HHS 402	Spring ACE Seminar	1
OUT Field Course		4
Discovery Course		4
	Credits	**17**
Second Year		
Fall		
RMP 557	Program and Event Design	4
RMP 563	Recreation Management and Policy Practicum	3
OUT 681	Foundations of Adventure Education	4
OUT Field Course		4
Discovery Course		4
	Credits	**19**
Spring		
OUT 686	Wilderness Emergency Medical Care	4
OLM Elective or LAP Elective		4-6
Discovery Course		4
Discovery Course		4
	Credits	**16-18**
Third Year		
Fall		
OUT 682 or RMP 641 or RMP 670	Experiential Teaching & Leadership or Group Facilitation and Leadership or Venue Management Design & Operations	4
RMP 772	Law and Public Policy in Leisure Services	4
OLM Elective or LAP Elective		4
Discovery Course		4
	Credits	**16**
Spring		
OUT 682 or RMP 641 or RMP 670	Experiential Teaching & Leadership or Group Facilitation and Leadership or Venue Management Design & Operations	4
RMP 776	Human Dimensions of Natural Environments	4
RMP 654	Professional Development and Ethics	3
OLM Elective or LAP Elective		4

Discovery Course		4
	Credits	**19**
Summer		
RMP 764	Internship (or taken during Senior Year)	8
	Credits	**8**
Fourth Year		
Fall		
RMP 711	Recreation Resource Management	4
OLM Electives or LAP Electives		8
Discovery Course		4
	Credits	**16**
Spring		
OLM Electives or Lap Electives		12
Discovery Course		4
	Credits	**16**
	Total Credits	**145-147**

Student Learning Outcomes

Program Learning Outcomes

- Students will know and demonstrate the nature and scope of the outdoor industry, including outdoor education, adventure leadership, and parks and protected-areas management.
- Students will know and demonstrate the techniques and processes used by professionals and staff in the outdoor industry.
- Students will know and demonstrate the foundation of the outdoor industry in history, science, and philosophy.
- Students will be able to demonstrate the ability to design, implement, and evaluate services that facilitate targeted human experiences and that embrace personal and cultural dimensions of diversity in outdoor settings.
- Students will demonstrate entry-level knowledge about operations, strategic management, and administration in the outdoor industry.
- Students will demonstrate the potential to succeed as professionals at supervisory or higher levels in the outdoor industry through participation in structured practicum and internship experiences.

Recreation Management and Policy Major: Therapeutic Recreation Option (B.S.)

https://www.unh.edu/program/bachelor-science/recreation-management-policy-therapeutic-recreation

Description

Beginning in the 2026-2027 academic year, the Recreation Management and Policy: Therapeutic Recreation B.S. is pausing admissions to the program. Current students will continue to have access to the same high-quality education and resources until they graduate.

Therapeutic recreation utilizes recreation to assist people with disabilities or illnesses to develop and use their leisure in ways that enhance health, independence, and well-being. Therapeutic recreation recognizes the importance of quality of life and uses activities to remediate or rehabilitate functional abilities. Therapeutic recreation services are provided in a variety of settings, including hospitals, long-term care facilities, residential treatment facilities, schools, home health care, community recreation, correctional facilities, rehabilitation centers, camp and outdoor education centers, and adult day programs. Observation and applied experience is a component of several courses. Students complete a 14-16-week full-time clinical internship under the supervision of a certified therapeutic recreation specialist (CTRS). The Bureau of Labor Statistics occupational outlook reports the "employment of recreational therapists is projected to grow 8 percent from 2019 to 2029, which is much faster than the average for all occupations. As the large baby-boom generation ages, they will need recreational therapists to help treat age-related injuries and illnesses, such as strokes. Recreational therapists will also be needed to help patients manage chronic conditions such as diabetes and obesity (Bureau of Labor Statistics). A CNN Money report identifies recreation therapy among the top ten "best jobs for saving the world." In particular, they note the profession's high benefit to society and high personal job satisfaction (CNN Money Magazine).

Upon successful completion of this option, students are prepared to meet sitting requirements for the National Council for Therapeutic Recreation Certification Examination. Students/graduates who pass the NCTRC exam and attain the CTRS are eligible to seek licensure to practice in the state of New Hampshire.

Students may be required to submit to a criminal background check.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

All majors must complete a core curriculum.

Code	Title	Credits
Core Requirements		
RMP 490	Recreation & Tourism in Society	4
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4
RMP 557	Program and Event Design	4
RMP 563	Recreation Management and Policy Practicum	3
RMP 654	Professional Development and Ethics	3
RMP 724	Research, Evaluation, and Data-Driven Decisions	4
RMP 764	Internship (Capstone) [1]	12

[1] A supervised internship is required for all RMP students and serves as the major capstone requirement. The internship is designed to create a bridge between theory and practical application. Students, working with their advisors and the internship coordinator, select an appropriate setting based on their professional and career interests. Students in the Therapeutic Recreation option must complete a 12-credit, 560-hour internship which ranges from 14 to 16 weeks and is under the

supervision of a Certified Therapeutic Recreation Specialist. Specific requirements are identified in the *Internship Manual* available from the Department of Recreation Management and Policy.

Code	Title	Credits
Therapeutic Recreation Option Requirements		
RMP 500	Therapeutic Recreation Methods in Physical Rehabilitation Settings	1
RMP 502	Foundations of Therapeutic Recreation	4
RMP 503	Therapeutic Recreation Rehabilitation Principles & Interventions	4
RMP 504	Therapeutic Recreation Mental Health Principles and Interventions	4
RMP 505	Therapeutic Recreation: Aging Services Principles & Interventions	4
RMP 612	Therapeutic Communication and Facilitation Techniques in Therapeutic Recreation	4
RMP 614	Assessment and Treatment Planning in Therapeutic Recreation	4
RMP 663	Financial Management in Recreation Services	4
TR Elective [2]		
Select one course from the following:		4
RMP 720	Adaptive Sport Facilitation for Recreation Therapy and Related Professions	
RMP 740	Therapeutic Recreation Service Delivery in Community Settings	
Required Support Courses		
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
HDFS 525	Human Development	4
PSYC 561	Psychopathology	4
Statistics Course		
Select one course from the following:		4
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	

[2] Or other TR related courses as approved by Academic Advisor. RMP students enrolled in an accelerated masters program offered by the Carsey School of Public Policy may count any Carsey graduate course as an elective toward their undergraduate RMP degree.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
BMS 507	Human Anatomy and Physiology I	4
RMP 490	Recreation & Tourism in Society	4
PSYC 401	Introduction to Psychology	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Spring		
BMS 508	Human Anatomy and Physiology II	4
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4
Statistics Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
RMP 502	Foundations of Therapeutic Recreation	4
RMP 500	Therapeutic Recreation Methods in Physical Rehabilitation Settings	1
RMP 503	Therapeutic Recreation Rehabilitation Principles & Interventions	4
RMP 563	Recreation Management and Policy Practicum	3
Discovery Course		4
	Credits	**16**
Spring		
RMP 557	Program and Event Design	4
RMP 504	Therapeutic Recreation Mental Health Principles and Interventions	4
RMP 505	Therapeutic Recreation: Aging Services Principles & Interventions	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
RMP 612	Therapeutic Communication and Facilitation Techniques in Therapeutic Recreation	4
HDFS 525	Human Development	4
RMP 654	Professional Development and Ethics	3
Discovery Course		4
	Credits	**15**
Spring		
RMP 614	Assessment and Treatment Planning in Therapeutic Recreation	4
PSYC 561	Psychopathology	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
RMP 764	Internship	12
	Credits	**12**
Spring		
RMP 724	Research, Evaluation, and Data-Driven Decisions	4
RMP 663	Financial Management in Recreation Services	4
TR Elective		4
Discovery Course		4
Elective Course		2-4
	Credits	**18-20**
	Total Credits	**125-127**

Student Learning Outcomes

Program Learning Outcomes

- Students will integrate an understanding of history, service models, theory/philosophy, ethics, credentials, professional conduct, evidence-based practice and professional development with Recreational Therapy (RT) practice.

- Students will develop competence to individually screen, assess and systematically collect comprehensive and accurate data about patients/clients in an efficient and effective manner and to analyze the data collected to determine the course of actions subsequent to an individualized treatment/program plan.
- Students will develop competence in the planning and development of individualized treatment plans that identify functional outcome goals, modalities, facilitation techniques and interventions based on assessment data collected and evidence regarding the diagnosis and treatment of specific medical, psychiatric and other disabling conditions.
- Students will know how to use structured, systematic and evidence-based treatment interventions and facilitation techniques to improve patient/client functioning and independence in life activities.
- Students will develop competence to implement the individualized treatment/program plan using appropriate evidence-based treatment interventions and programs to restore, remediate, or rehabilitate patient/client functioning as well as to reduce or eliminate the limitations to participation in life activities resulting from medical, psychiatric or other disabling conditions.
- Students will acquire specific modality/skills and facilitation techniques used as treatment interventions in Recreational Therapy practice.
- Students will systematically conduct evaluation and research to determine the effectiveness of treatment interventions and programs used to reach patient/client outcomes.
- Students will develop the competencies to manage a Recreational Therapy practice, department, and staff.
- Students will develop an understanding of human anatomy and physiology, growth/development, psychology, functioning in life activities and an understanding of health care services to serve as a foundation for Recreational Therapy practice.
- Students will develop entry-level clinical proficiency and professional behavior through field-based clinical opportunities in accordance with professional standards of practice in Recreational Therapy

Disclosures

Recreation Management and Policy Major: Therapeutic Recreation Option (B.S.)

Location/Delivery: College of Health and Human Services, Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Certified Therapeutic Recreation Specialist

National Council for Therapeutic Recreation Certification (NCTRC) Examination

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Recreation Management and Policy Major: Tourism and Event Management Option (B.S.)

https://www.unh.edu/program/bachelor-science/recreation-management-policy-tourism-event-management

Description

In UNH's Tourism and Event Management (TEM) program you'll develop skills in event planning, tourism operations, and recreation management alongside faculty from one of the nation's most respected departments in the recreation administration field. With a curriculum that emphasizes practical experience and industry connections, you'll learn to apply your skills in settings such as tourism and event marketing and management firms, resorts, residential facilities, community development agencies, and festival and event businesses.

If you are already a UNH student and want to change your major to TEM, complete the online change of major form. Applications are accepted throughout the year and decisions are made on a rolling admission basis.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

All majors must complete a core curriculum.

Code	Title	Credits
Required Courses		
RMP 490	Recreation & Tourism in Society	4
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4
RMP 557	Program and Event Design	4
RMP 563	Recreation Management and Policy Practicum	3
RMP 654	Professional Development and Ethics	3

RMP 661	Organizational Leadership in Recreation Services	4
RMP 764	Internship (Capstone) [1]	8 or 12

[1] All RMP students must complete an 8 or 12 credit hour internship.

Code	Title	Credits
Tourism and Event Management Option - Course Requirements		
TOUR 400	Introduction to Tourism	4
RMP 559	Tourism and Event Marketing	4
RMP 680	Festival and Community Event Planning	4
or HMGT 661	Event Design, Planning, and Management	
RMP 663	Financial Management in Recreation Services	4
RMP 724	Research, Evaluation, and Data-Driven Decisions	4
RMP 772	Law and Public Policy in Leisure Services	4
Electives		
Choose from the following courses:		12
TOUR 510	Tourism and Global Understanding	
RMP 603	New Hampshire Ski Industry Management	
RMP 668	Youth Culture and Programs	
RMP 670	Venue Management Design & Operations	
RMP 680	Festival and Community Event Planning	
RMP 711	Recreation Resource Management	
RMP 775	Entrepreneurial and Commercial Recreation	
RMP 776	Human Dimensions of Natural Environments	
RMP 780	Event and Experience Design	
HMGT 570	International Food and Culture	
HMGT 601	Management of Customer Services and Experiences	
HMGT 635	Leadership and HR Management in Hospitality and Tourism	
HMGT 661	Event Design, Planning, and Management	
HMGT 667	Advanced Food & Beverage Operations & Event Management	
HMGT 681	Contemporary Resort Development and Management	
HMGT 758	Revenue Management: The Art of Pricing	
HMGT 771	International Wine and Beverage	
HMGT 777	Casino Management	
HMGT 798	Topics	
CEP 415	Community Development Perspectives	
CEP 508	Applied Community Development	
CEP 614	Fundamentals of Planning	
CEP 627	Community Economics	
CEP 673	Green Real Estate	
**or any courses recommended by academic advisor		
Total Credits		**66-70**

Professional Internship

A supervised internship (RMP 764) is required of all majors and serves as their **major capstone requirement**. The internship is designed to create a bridge between theory and practical application. Students, working with their advisers and the internship coordinator, select an appropriate setting based on their professional and career interests. They must register for an **8 or 12 credit full-time internship** that ranges from 10 to 16 weeks and is under the supervision of a qualified professional. Specific requirements are identified in the *Internship Manual* available from the Department of Recreation Management and Policy.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
RMP 490	Recreation & Tourism in Society	4
ENGL 401	First-Year Writing	4
Discovery Course (INQ)		4
Discovery Course (QR)		4
	Credits	**16**
Spring		
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4
RMP TEM Elective Course		4
Discovery Course (BS)		4
Discovery Course (PS/Lab)		4
	Credits	**16**
Second Year		
Fall		
RMP 557	Program and Event Design	4
Minor/Free Elective		4
Discovery Course (ETS)		4
Discovery Course (FPA)		4
	Credits	**16**
Spring		
TOUR 400	Introduction to Tourism	4
RMP 559	Tourism and Event Marketing	4
RMP 663	Financial Management in Recreation Services	4
Discovery Course (HP)		4
	Credits	**16**
Third Year		
Fall		
RMP 661	Organizational Leadership in Recreation Services	4
RMP TEM Elective Course		4
Discovery Course (HUMA)		4
RMP 680 or HMGT 661	Festival and Community Event Planning or Event Design, Planning, and Management	4
RMP 563	Recreation Management and Policy Practicum	3
	Credits	**19**
Spring		
RMP TEM Elective Course		4
RMP TEM Elective Course		4
Discovery Course (SS)		4
Discovery Course (WC)		4
	Credits	**16**
Fourth Year		
Fall		
RMP 724	Research, Evaluation, and Data-Driven Decisions	4
RMP 772	Law and Public Policy in Leisure Services	4
Minor/Free Elective		4
Minor/Free Elective		4

RMP 654	Professional Development and Ethics	3
	Credits	**19**
Spring		
RMP 764	Internship	8-12
	Credits	**8-12**
	Total Credits	**126-130**

Student Learning Outcomes

Program Learning Outcomes

- Students will know and demonstrate the nature and scope of the recreation, events, and tourism profession and their associated industries.
- Students will know and demonstrate the techniques and processes used by professionals and staff in the recreation, events, and tourism industry.
- Students will know and demonstrate the foundation of the recreation, events, and tourism profession in history, science, and philosophy.
- Students will demonstrate the ability to design, implement, and evaluate services that facilitate targeted human experiences and that embrace personal and cultural dimensions of diversity.
- Students will demonstrate knowledge about operations, strategic management, and administration in recreation, events, and tourism organizations.
- Students will demonstrate the potential to succeed as professionals at supervisory or higher levels in recreation, events, tourism, or related organizations through participation in structured practicum and internship experiences.

Recreation Management Minor

https://www.unh.edu/program/minor/recreation-management

Description

The recreation industry is a broad field including festival and event planning, non-profit administration, travel and tourism, sport, municipal recreation, and outdoor recreation. This industry is experiencing worldwide growth which is opening up tremendous workforce opportunities. The primary goal of the recreation management minor is to provide a basic understanding of the recreation industry and the variety of careers associated with this industry for students interested in staying on their existing academic pathway. The required core course for this minor, provides a comprehensive overview of the recreation industry. Students select additional elective courses from a list of offerings that lend themselves to specific areas of knowledge and interest.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (18-20 credits).

Code	Title	Credits
Required Course		
RMP 490	Recreation & Tourism in Society	4
Electives		
Select 4 courses from the following:		
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4
RMP 557	Program and Event Design	4
RMP 560	Recreational Sport Management	4
RMP 603	New Hampshire Ski Industry Management	4
RMP 668	Youth Culture and Programs	4
RMP 670	Venue Management Design & Operations	4
RMP 680	Festival and Community Event Planning	4
RMP 711	Recreation Resource Management	4
RMP 720	Adaptive Sport Facilitation for Recreation Therapy and Related Professions	4
RMP 775	Entrepreneurial and Commercial Recreation	4
RMP 780	Event and Experience Design	4
LAP 500 Level Course		2
Suggested Areas of Emphasis (for 4 Electives)		
Event Planning		
RMP 557	Program and Event Design	4
RMP 670	Venue Management Design & Operations	4
RMP 680	Festival and Community Event Planning	4
RMP 780	Event and Experience Design	4
Community Recreation & Sport		
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4
RMP 557	Program and Event Design	4
RMP 560	Recreational Sport Management	4
RMP 668	Youth Culture and Programs	4
Commercial Recreation		
RMP 603	New Hampshire Ski Industry Management	4
RMP 670	Venue Management Design & Operations	4
RMP 711	Recreation Resource Management	4
RMP 775	Entrepreneurial and Commercial Recreation	4

Ski Resort Management Cognate

https://www.unh.edu/program/cognate/ski-resort-management

Description

Skiing has long been central to New Hampshire's economy and culture and it comprises a large part of the state's tourism market. Snowsports are the second largest contributor to New Hampshire's $3.9 billion dollar outdoor recreation economy and mountain resorts are now a 4-season business encompassing adventure sports, conferences, hospitality, real estate, and events. Combining academic work, field experience, and risk management competencies, this program bridges the gap between students and potential careers in the local, state, and regional ski and snowboard industry. This cognate capitalizes on the growing interest in ski industry jobs and careers.

Requirements

- Credit toward the cognate will only be given for courses passed as credit and/or with C- or better.
- A 2.00 grade-point average must be maintained in courses for the cognate.
- Students must complete a certification of completion of cognate form at the beginning of their final semester.
- Students must complete 14 credits total as outlined below for the cognate.

Code	Title	Credits
Required Courses		
RMP 603	New Hampshire Ski Industry Management	4
RMP 571	Mountain Resort Practicum	3
RMP 411	Applied Recreation Risk Management	3
Electives		
Select one course from the following:		4

ESCI 405	Global Environmental Change	
HMGT 681	Contemporary Resort Development and Management	
RMP 711	Recreation Resource Management	
RMP 775	Entrepreneurial and Commercial Recreation	
Total Credits		**14**

Student Learning Outcomes

Program Learning Outcomes

Ski resort industry knowledge

- Basic understanding of social, economic, operational, and environmental perspectives of the ski and snowboard industry.

Risk management

- Students should leave this course with competency in liability issues and legal considerations at ski and snowboard resort settings.

Practical experience

- This hands-on practicum allows students to apply skills in a professional setting, providing the necessary operational experience for a career in the ski and snowboard industry.

Therapeutic Recreation Minor

https://www.unh.edu/program/minor/therapeutic-recreation

Description

The Therapeutic Recreation (TR) Minor provides students from any major with foundational knowledge and practical skills in using recreation and leisure to promote health, well-being, and quality of life for individuals with disabilities, illnesses, and other health-related needs. The minor introduces students to the principles, processes, and professional competencies of therapeutic recreation through coursework in facilitation techniques, assessment, treatment planning, and the theory and practice of inclusive recreation.

Although the minor alone does not meet all requirements for national certification, it provides significant progress toward eligibility as a Certified Therapeutic Recreation Specialist (CTRS) through the National Council for Therapeutic Recreation Certification (NCTRC). Students who wish to pursue certification can complete remaining supportive coursework and internship requirements through elective choices or post-graduate pathways.

Graduates with a Therapeutic Recreation Minor are prepared for roles in a wide range of settings, including healthcare, rehabilitation, youth and family services, behavioral health, community recreation, and adaptive sports programs. The minor complements majors in health and human services, psychology, education, kinesiology, social work, and other fields where professionals support human development, wellness, and inclusion. By integrating theoretical learning with applied skills, the TR Minor equips students to incorporate recreation-based interventions into their professional practice and to contribute to the health and well-being of diverse populations.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
RMP 502	Foundations of Therapeutic Recreation	4
RMP 612	Therapeutic Communication and Facilitation Techniques in Therapeutic Recreation	4
RMP 614	Assessment and Treatment Planning in Therapeutic Recreation	4
Electives		
Select two courses from the following: [1]		8
RMP 503	Therapeutic Recreation Rehabilitation Principles & Interventions	
RMP 504	Therapeutic Recreation Mental Health Principles and Interventions	
RMP 720	Adaptive Sport Facilitation for Recreation Therapy and Related Professions	
RMP 740	Therapeutic Recreation Service Delivery in Community Settings	
Total Credits		**20**

[1] Or another course approved by the Minor Coordinator.

Student Learning Outcomes

Program Learning Outcomes

- Students will integrate an understanding of history, service models, theory/philosophy, ethics, credentials, professional conduct, evidence-based practice and professional development with Recreational Therapy (RT) practice.
- Students will develop competence to individually screen, assess and systematically collect comprehensive and accurate data about patients/clients in an efficient and effective manner and to analyze the data collected to determine the course of actions subsequent to an individualized treatment/program plan.
- Students will develop competence in the planning and development of individualized treatment plans that identify functional outcome goals, modalities, facilitation techniques and interventions based on assessment data collected and evidence regarding the diagnosis and treatment of specific medical, psychiatric and other disabling conditions.
- Students will know how to use structured, systematic and evidence-based treatment interventions and facilitation techniques to improve patient/client functioning and independence in life activities.
- Students will develop competence to implement the individualized treatment/program plan using appropriate evidence-based treatment interventions and programs to restore, remediate, or rehabilitate patient/client functioning as well as to reduce or eliminate the limitations to participation in life activities resulting from medical, psychiatric or other disabling conditions.
- Students will acquire specific modality/skills and facilitation techniques used as treatment interventions in Recreational Therapy practice.
- Students will systematically conduct evaluation and research to determine the effectiveness of treatment interventions and programs used to reach patient/client outcomes.
- Students will develop entry-level clinical proficiency and professional behavior through field-based clinical opportunities in accordance with professional standards of practice in Recreational Therapy

Tourism Minor

https://www.unh.edu/program/minor/tourism

Description

Tourism is one of the world's largest and most diverse industries, spanning a wide range of sectors that shape how people travel, recreate, and experience places. Tourism is a dynamic combination of activities, services, and organizations that deliver travel and visitor experiences through transportation, lodging, food and beverage establishments, retail and shopping, entertainment, outdoor recreation facilities (such as parks and sports venues), cultural and historic sites, and natural resources, among many others.

To support students interested in this rapidly growing field, faculty in Recreation Management and Policy (RMP), Hospitality Management (HMGT), and Natural Resources and the Environment (NREN) have developed an interdisciplinary Minor in Tourism. This minor bundles existing courses across the three departments, allowing non-majors to gain foundational knowledge in tourism while tailoring the program through elective options that align with their interests and career goals. The minor draws on expertise across three colleges: the College of Health and Human Services, the Peter T. Paul College of Business and Economics, and the College of Life Sciences and Agriculture, offering students a well-rounded academic experience grounded in both industry and place-based perspectives.

This minor benefits students by providing practical, career-relevant skills in areas such as visitor experience design, tourism planning and management, sustainability, and the economic and social impacts of tourism. Whether students plan to work in outdoor recreation, hospitality, event management, destination marketing, park and protected area management, or community development, the Tourism minor strengthens their ability to understand and contribute to the tourism sector in thoughtful, ethical, and sustainable ways.

Questions about the minor may be directed to: Dr. Lauren Ferguson, at Lauren.Ferguson@unh.edu

Approval of the Minor for Graduation, verification, and sign-off must be coordinated with Dr. Lauren Ferguson.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
TOUR 400	Introduction to Tourism	4
RMP 490	Recreation & Tourism in Society	4
CEP 415	Community Development Perspectives	4
Electives		
Select two courses from the following: [1]		8
TOUR 510	Tourism and Global Understanding	
RMP 775	Entrepreneurial and Commercial Recreation	
HMGT 570	International Food and Culture	
HMGT 798	Topics (Management of Attractions and Theme Parks#)	
CEP 614	Fundamentals of Planning	
CEP 627	Community Economics	
Total Credits		**20**

[1] Additional elective courses may be approved by the minor coordinator.

School of Nursing

University of New Hampshire School of Nursing

The undergraduate nursing program is nationally accredited by the Commission on Collegiate Nursing Education

Students in the School of Nursing learn about relationship-based care, reflective thinking and clinical decision making while following guidelines for developing safe, quality clinical skills. Nursing students learn from faculty who serve as facilitators and mentors within a supportive, scholarly environment, and as graduates become part of the workforce that will help shape the future of healthcare.

https://chhs.unh.edu/nursing

Programs

- Nursing Major (B.S.N.) (p. 206)

Faculty

Nursing Department Faculty

Nursing Major (B.S.N.)

https://www.unh.edu/program/bachelor-science-nursing/nursing

Description

Bachelor of Science in Nursing (BSN)

Program Overview
The Bachelor of Science in Nursing (BSN) program prepares students for professional practice as Registered Nurses who deliver safe, evidence-based, and relationship-centered care across diverse settings. Faculty serve as mentors and partners in learning, fostering a supportive, scholarly environment where students develop clinical judgment, professional identity, and reflective practice. The program emphasizes cultural humility and high standards of quality and safety to prepare graduates for the complexities of modern healthcare.

Curriculum & Learning Experience
Grounded in the biological and social sciences and the humanities, the curriculum develops strong critical thinking, ethical reasoning, and person-centered communication skills. Students progress through a carefully sequenced plan of study aligned with the AACN Essentials, including population health, health equity, leadership, informatics, and interprofessional collaboration. Throughout the program, students gain experience with electronic health records, clinical decision support tools, and emerging digital health technologies to enhance care delivery and outcomes.

Clinical Education, Simulation, and Partnerships
Clinical learning is enhanced through a state-of-the-art simulation center using high-fidelity scenarios, skills practice, and guided debriefing to strengthen clinical judgment, communication, and confidence. Simulation

is integrated across the curriculum to support equitable, evidence-based care.
Students complete diverse clinical placements in acute care, community and public health, primary care, mental health, and long-term care settings. Partnerships with regional health systems and community organizations provide authentic experiences that emphasize collaboration, professionalism, and advocacy.

Senior Capstone: Transition to Practice
In the senior year, students complete a precepted transition-to-practice capstone. Working with an experienced Registered Nurse, students integrate program competencies, manage care priorities, and refine leadership, communication, and time-management skills to support a confident transition into entry-level practice.

Professional Readiness & Outcomes
Graduates are prepared to deliver high-quality, person-centered care; collaborate with interprofessional teams; promote population health; and use data and technology to improve outcomes. Upon completion of program requirements, graduates are eligible to sit for the NCLEX-RN® licensure examination (in accordance with state regulations) and are well prepared for professional practice or graduate study.

Honors in Major (Optional)
Eligible students may pursue Honors in Major, offering opportunities for advanced scholarship, mentorship, leadership development, and engagement in evidence-based or quality improvement projects. (See the Requirements tab for details.)

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Candidates for the nursing degree must satisfy all of the University Discovery Program requirements in addition to satisfying major requirements.

- Discovery courses that are required for the major require a minimum grade of C or better in the major.
- Most of the prerequisite courses also meet Discovery requirements.
- Major courses require a minimum grade of C or better.
- A cumulative grade-point average of 2.5 must be maintained throughout the program.

Code	Title	Credits
Required Courses		
Two Discovery/Elective/Writing Intensive Courses		8
Seven Discovery/Elective Courses		28
ENGL 401	First-Year Writing [1]	4
BMS 501	Microbes in Human Disease [1]	4
BMS 507	Human Anatomy and Physiology I [1]	4
BMS 508	Human Anatomy and Physiology II [1]	4
HDFS 525	Human Development [1]	4
HHS 401	College of Health and Human Services Seminar	1
HMP 540	Statistics for Health and Human Service Professionals [1]	4
or PSYC 402	Statistics in Psychology	
or SOC 402	Statistics	
or MATH 439	Statistical Discovery for Everyone	
PSYC 401	Introduction to Psychology [1]	4
NURS 530	Professional Nursing Concepts and Theories	4
NURS 531	Evidence Based Innovations in Nursing	4
NURS 532	Integrative Pathopharmacology in Nursing	4
NURS 534	Fundamentals of Nursing Practice [2]	6
NURS 630	Nursing Care of Adults with Chronic Conditions [2]	6
NURS 631	Nursing Care of Adults with Acute Conditions [2]	6
NURS 632	Psychiatric-Mental Health Nursing [2]	6
NURS 633	Nursing Care in Reproductive and Sexual Health [2]	6
NURS 730	Integrated Pediatric and Family Nursing [2]	6
NURS 732W	Nursing Leadership within Healthcare Sysems	4
NURS 733	Transition to Professional Nursing Practice [2]	8
NURS 734	Perspectives in Population Health Nursing [2]	6
Total Credits		**131**

1. Discovery courses that are required for the major require a grade of C or better in the major.
2. Clinical hours are completed through the following required courses: NURS 534, NURS 630, NURS 631, NURS 632, NURS 633, NURS 730, NURS 733, and NURS 734.

Honors-in-Major Program

The Honors-in-Major Program is offered to interested junior nursing students who achieve a minimum grade-point average of 3.75 in NURS courses and cumulative GPA of 3.4 at the end of the sophomore year in nursing and/or junior nursing students who are members of the University Honors Program. A total of 18 credits taken at the honors level is required for the Honors-in-Major Program. Orientation to the Honors-in-Major Program is held at the beginning of the junior nursing year. Students must successfully complete with a grade of B or better 8 additional credits of honors coursework drawn from the following courses:

Code	Title	Credits
Select two courses from the following:		
NURS 630	Nursing Care of Adults with Chronic Conditions	6
NURS 631	Nursing Care of Adults with Acute Conditions	6
NURS 732W	Nursing Leadership within Healthcare Sysems	4
NURS 734	Perspectives in Population Health Nursing	6

Honors-in-major students must also successfully complete with a grade of B or better:

Code	Title	Credits
NURS 648W	Nursing Honors Seminar I	1-4
NURS 748W	Nursing Honors Thesis I	1
NURS 749W	Nursing Honors Thesis II	4

These self-directed learning experiences, related to the student's interests, are designed to help students acquire advanced knowledge and skills to undertake inquiry or scholarly projects. Students must submit a project description to a faculty mentor at the beginning of the senior year. Students have the option to complete a student research project, which must undergo University IRB proposal approval, or a student Quality Improvement project, which must undergo School of Nursing Quality Improvement Committee proposal review. All students

completing Honors-in-Major will complete a written thesis or capstone to be submitted for inclusion in the UNH Scholars' Repository and present at the annual UNH Undergraduate Research Conference.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

4-Year BSN - Group A Students

First Year		
Fall		**Credits**
BMS 507	Human Anatomy and Physiology I (Discovery BS, DLab)	4
ENGL 401	First-Year Writing (Discovery WS, WI)	4
HHS 401	College of Health and Human Services Seminar	1
HDFS 525	Human Development (Discovery SS)	4
NURS 530	Professional Nursing Concepts and Theories	4
	Credits	**17**
Spring		
BMS 508	Human Anatomy and Physiology II (Discovery BS, DLab)	4
PSYC 401	Introduction to Psychology (Discovery SS)	4
PSYC 402 or SOC 402 or MATH 439 or HMP 540	Statistics in Psychology (Discovery QR) or Statistics or Statistical Discovery for Everyone or Statistics for Health and Human Service Professionals	4
NURS 531	Evidence Based Innovations in Nursing	4
	Credits	**16**
Second Year		
Fall		
BMS 501	Microbes in Human Disease (Discovery BS, DLab)	4
NURS 532	Integrative Pathopharmacology in Nursing	4
Discovery/Inquiry		4
Discovery/Inquiry/Writing Intensive		4
	Credits	**16**
Spring		
NURS 534	Fundamentals of Nursing Practice	6
Discovery/Inquiry		4
Discovery/Inquiry		4
Discovery/Inquiry/Writing Intensive		4
	Credits	**18**
Third Year		
Fall		
NURS 631	Nursing Care of Adults with Acute Conditions	6
NURS 632	Psychiatric-Mental Health Nursing	6
Discovery/Elective		4
	Credits	**16**
Spring		
NURS 630	Nursing Care of Adults with Chronic Conditions	6
NURS 633	Nursing Care in Reproductive and Sexual Health	6
Discovery/Elective		4
	Credits	**16**
Fourth Year		
Fall		
NURS 730	Integrated Pediatric and Family Nursing	6
NURS 734	Perspectives in Population Health Nursing	6
Discovery/Elective		4
	Credits	**16**
Spring		
NURS 732W	Nursing Leadership within Healthcare Sysems	4
NURS 733	Transition to Professional Nursing Practice	8
Discovery/Elective		4
	Credits	**16**
	Total Credits	**131**

4-Year BSN - Group B Students

First Year		
Fall		**Credits**
BMS 507	Human Anatomy and Physiology I (Discovery BS, DLab)	4
PSYC 401	Introduction to Psychology (Discovery SS)	4
HHS 401	College of Health and Human Services Seminar	1
PSYC 402 or SOC 402 or MATH 439 or HMP 540	Statistics in Psychology (Discovery QR) or Statistics or Statistical Discovery for Everyone or Statistics for Health and Human Service Professionals	4
NURS 531	Evidence Based Innovations in Nursing	4
	Credits	**17**
Spring		
BMS 508	Human Anatomy and Physiology II (Discovery BS, DLab)	4
ENGL 401	First-Year Writing (Discovery WS, WI)	4
HDFS 525	Human Development (Discovery SS)	4
NURS 530	Professional Nursing Concepts and Theories	4
	Credits	**16**
Second Year		
Fall		
BMS 501	Microbes in Human Disease (Discovery BS, DLab)	4
NURS 534	Fundamentals of Nursing Practice	6
Discovery/Inquiry		4

Discovery/Inquiry/Writing Intensive		4
	Credits	**18**
Spring		
NURS 532	Integrative Pathopharmacology in Nursing	4
Discovery/Inquiry		4
Discovery/Inquiry		4
Discovery/Inquiry/Writing Intensive		4
	Credits	**16**
Third Year		
Fall		
NURS 630	Nursing Care of Adults with Chronic Conditions	6
NURS 633	Nursing Care in Reproductive and Sexual Health	6
Discovery/Elective		4
	Credits	**16**
Spring		
NURS 631	Nursing Care of Adults with Acute Conditions	6
NURS 632	Psychiatric-Mental Health Nursing	6
Discovery/Elective		4
	Credits	**16**
Fourth Year		
Fall		
NURS 732W	Nursing Leadership within Healthcare Sysems	4
NURS 733	Transition to Professional Nursing Practice	8
Discovery/Elective		4
	Credits	**16**
Spring		
NURS 730	Integrated Pediatric and Family Nursing	6
NURS 734	Perspectives in Population Health Nursing	6
Discovery/Elective		4
	Credits	**16**
	Total Credits	**131**

Non-Nursing Associate Degree to BSN Students

First Year		
Summer		**Credits**
NURS 530	Professional Nursing Concepts and Theories	4
NURS 532	Integrative Pathopharmacology in Nursing	4
NURS 534	Fundamentals of Nursing Practice	6
	Credits	**14**
Fall		
NURS 631	Nursing Care of Adults with Acute Conditions	6
NURS 632	Psychiatric-Mental Health Nursing	6
NURS 531	Evidence Based Innovations in Nursing	4
Discovery/Elective		4
	Credits	**20**
Spring		
NURS 630	Nursing Care of Adults with Chronic Conditions	6
NURS 633	Nursing Care in Reproductive and Sexual Health	6
Discovery/Elective		4
	Credits	**16**
Second Year		
Fall		
NURS 730	Integrated Pediatric and Family Nursing	6
NURS 734	Perspectives in Population Health Nursing	6
Discovery/Elective		4
Discovery/Elective		4
	Credits	**20**
Spring		
NURS 732W	Nursing Leadership within Healthcare Sysems	4
NURS 733	Transition to Professional Nursing Practice	8
Discovery/Elective		4
	Credits	**16**
	Total Credits	**86**

Student Learning Outcomes

Program Learning Outcomes

At the completion of the baccalaureate nursing program, the student is prepared to

- Apply knowledge from liberal arts and sciences to deliver safe, competent, and compassionate care to diverse patients, families, and communities.
- Provide holistic, individualized, and evidence-based person and family centered care across the lifespan while advocating for social justice and equity in health care accessibility and quality.
- Engage in collaborative activities with community partners to advocate for equity and justice to improve health-related social needs and enhance population health.
- Utilize scholarly inquiry to inform best practices and compile evidence to address health-related problems across the healthcare system.
- Apply quality improvement science, to identify safety concerns and engage in risk mitigation strategies to improve patient care outcomes.
- Collaborate within multidisciplinary care teams, through effective communication and mutual respect, that enhances the quality of healthcare services and their delivery.
- Identify resources, across transitions of care in ever-changing healthcare systems, applying knowledge of cost-effectiveness and health policies to deliver equitable care.
- Utilize healthcare technologies and informatics processes to inform the provision of safe and effective care and support meaningful changes in nursing practice.
- Demonstrate a professional nursing identity marked by integrity, curiosity, civility, inclusion, and ethical practice.

- Participate in self-reflection to foster personal resilience and well-being and embrace lifelong learning to develop nursing expertise.

Disclosures

Nursing (B.S.N.)

Location/Delivery: School of Nursing, Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Registered Nurse
National Council Licensure Examination for Registered Nurses

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alaska, American Samoa, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Social Work (SW)

The Department of Social Work's undergraduate program is accredited by the Council on Social Work Education (CSWE) and must meet rigorous academic standards to retain this accreditation. Social work majors pursue a program that encompasses the professional social work competencies of professional identity, critical thinking, knowledge of diversity and human rights, social, environmental and economic justice, social welfare policy and services, social work practice with all client system sizes, human behavior in the social environment, research, and ethics.

According to the National Association of Social Workers (NASW), "The social work profession provides ethical, practical, and compassionate leadership to help people confront and resolve personal and social challenges" through their work with individuals, families, small groups, organizations, and communities. All social work majors complete a field internship under the direction of a qualified supervisor.

https://chhs.unh.edu/social-work

Programs

- Social Work Major (B.S.) (p. 210)
- Social Work Minor (p. 212)
- Gerontology Multidisciplinary Minor (p. 212)

Faculty

Social Work Department Faculty

Social Work Major (B.S.)

https://www.unh.edu/program/bachelor-science/social-work

Description

The Department of Social Work's undergraduate program is accredited by the Council on Social Work Education (CSWE) and must meet rigorous academic standards to retain this accreditation.

The Department of Social Work's undergraduate program offers both a major and a minor in social work. It is a specialized degree that prepares graduates for generalist social work practice with a solid foundation in the liberal arts and in the knowledge, skills, and value base of social work. Through the mastery of core competencies, social work graduates apply their education working with individuals, families, groups, organizations, and communities. In addition, the program prepares qualified students to pursue graduate education in schools of social work and related fields.

Social work majors earn a B.S. degree in social work. Graduates are eligible for practice in a variety of social work settings throughout the United States. In preparation for graduate school, the program offers an Accelerated Masters that qualified students can consider applying for their junior year. In addition, qualified graduates are eligible to apply for advanced standing in M.S.W. programs that offer advanced standing. Depending upon the program, this can mean earning the M.S.W. in one calendar year versus two academic years.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of the social work major.

Students must maintain a 2.6 Semester GPA and earn a C or better in the 13 social work major courses. In addition, students are expected to successfully complete three additional courses as part of a liberal arts foundation for the major. Students are required to complete 40 hours of advisor approved human service hours by end of first semester junior year.

To connect the theoretical and conceptual content of the classroom with the practice world, students must complete:

- 40 hours of human service related work in an approved agency/program setting by the end of the semester when they apply to the internship. Twenty of the forty hours must be in the same agency/program. The remaining hours may be across multiple sites/programs. This experience may be paid or volunteer and must be pre-approved by the student's faculty adviser. The service hours must be completed post high school and by the end of the semester when to internship applications are due.
- Students complete a 400-hour internship over two consecutive semesters during the senior year. This is the senior capstone experience. The internship placement in the final year of the baccalaureate program is arranged between the student and the internship education coordinator. In compliance with CSWE accreditation standards, the B.S. in social work program does not grant social work course credit for life or work experience.

Code	Title	Credits
Required Courses		
SW 424	Introduction to Social Work	4
SW 501	Research Methods in Social Work	4
SW 525	Social Welfare Policy: History of Social and Economic Justice	4
SW 550	Human Behavior and Social Environment I	4
SW 551	Human Behavior and Social Environment II	4
SW 622	Social Work Practice: Interventions with Individuals and Families	4
SW 623	Social Work Practice: Interventions with Groups, Organizations and Communities	4
SW 625	Social Welfare Policy: Analysis, Activism, and Advocacy	4
SW 630	Anti Oppressive Practice in Social Work	4
Category I: Anthropology & Sociology Requirement		
Select one course from the following:		4
ANTH 411	Global Perspectives on the Human Condition: An Introduction to Anthropology	
ANTH 500	Peoples and Cultures of the World	
SOC 400	Introductory Sociology	
SOC 515	Introductory Criminology	
SOC 520	Family	
SOC 525	Juvenile Crime and Delinquency	
SOC 535	Homicide	
Category II: Human Biology Requirement		
Select one course from the following:		4
ZOOL 401	Human Biology	
BMS 507	Human Anatomy and Physiology I	
BMS 508	Human Anatomy and Physiology II	
Category III: Diversity Requirement		
Select one course from the following:		4
ANTH 625	Sexuality in Cross-Cultural Perspective	
CMN 567	Gender, Race, and Class in the Media	
ENGL 550	Introduction to the Literature and Culture of Race	
GERO 500	I'm Old, So What! An introduction to aging in the United States	
HIST 440A	Martin Luther King, Jr., and the Struggle for Racial Justice	
HIST 505	African American History	
HIST 532	Modern Latin America	
INCO 505A	Becoming a Problem Solver	
PHIL 510	Philosophy and Feminism	
RMP 444A	Taking the "Dis" out of Disability	
SOC 645	Class, Status and Power	
SW 660	Exploring Issues in Housing and Homelessness	
SW 715	Affirming Practice with Lesbian, Gay, Bisexual, Transgender, Queer+ People	
WGS 401W	Introduction to Women's Studies	
WGS 405	Gender, Power and Privilege	
WGS 444A	Race Matters	
WGS 632W	Feminist Thought	
Senior Capstone Course Sequence		
SW 740	Social Work Internship Experience	4
SW 740A	Social Work Internship Experience I: Seminar	4
SW 741	Social Work Internship Experience II	4
SW 741A	Social Work Internship Experience II: Seminar	4
Total Credits		**64**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
SW 424	Introduction to Social Work	4
ENGL 401	First-Year Writing	4
HHS 401	College of Health and Human Services Seminar	1
Discovery Course		4
Discovery Course		4
	Credits	**17**
Spring		
Category II: Biology (ex. ZOOL 401)		4
Discovery Course		4
Discovery Course		4
Category III: Diversity		4
HHS 402	Spring ACE Seminar	1
	Credits	**17**
Second Year		
Fall		
SW 525	Social Welfare Policy: History of Social and Economic Justice	4
SW 550	Human Behavior and Social Environment I	4
Discovery Course		4
Elective		4
	Credits	**16**
Spring		
SW 501	Research Methods in Social Work	4
SW 551	Human Behavior and Social Environment II	4
Elective		4
Elective		4
	Credits	**16**
Third Year		
Fall		
SW 622	Social Work Practice: Interventions with Individuals and Families	4
SW 630	Anti Oppressive Practice in Social Work	4
Elective		4
Elective		4
	Credits	**16**
Spring		
SW 623	Social Work Practice: Interventions with Groups, Organizations and Communities	4
SW 625	Social Welfare Policy: Analysis, Activism, and Advocacy	4

Category I: Soc/Anthro (ANTH 411 or Study Abroad)		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
SW 740	Social Work Internship Experience	4
SW 740A	Social Work Internship Experience I: Seminar	4
Elective		4
Elective		4
	Credits	**16**
Spring		
SW 741	Social Work Internship Experience II	4
SW 741A	Social Work Internship Experience II: Seminar	4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**130**

Student Learning Outcomes

Program Learning Outcomes

- Student demonstrates ethical and professional behavior.
- Engage Anti-Racism, Diversity, Equity, and\\nInclusion (ADEI) in Practice
- Student advances human rights and social, economic and environmental justice.
- Engage in practice informed research and research-informed practice.
- Engages in policy practice.
- Engage with individuals, families, groups, organizations, and communities.
- Assess individuals, families, groups, organizations, and communities.
- Intervenes with individuals, families, groups, organizations, and communities.
- Evaluates practice with individuals, families, groups, organizations, and communities.

Social Work Minor

https://www.unh.edu/program/minor/social-work

Description

Social work is about helping individuals, families and community members with problems in their daily lives and advocating for those who need a voice.In the social work minor, you'll learn about the history, values and ethics of the social work profession and social welfare policy,and be introduced to human behavior and social work practices. Enhance your career opportunities by combining this minor with undergraduate study in areas such as education, healthcare, justice studies or sociology.

Students interested in a minor in social work should consult with the undergraduate program coordinator, Gretchen Bean, Pettee Hall, Room 241, (603) 862-4551.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
SW 424	Introduction to Social Work	4
SW 525	Social Welfare Policy: History of Social and Economic Justice	4
Select any three other courses offered by the department [1]		12
Total Credits		**20**

[1] Excluding SW 622, SW 623, SW 625, SW 740, SW 740A, SW 741, SW 741A.
SW 622, SW 623, and SW 625 are by permission only with program coordinator approval.

Gerontology Multidisciplinary Minor

https://www.unh.edu/program/minor/gerontology-multidisciplinary

Description

The gerontology multidisciplinary minor (GMM) provides students with the opportunity to examine and evaluate the aging process as it affects the individual and society within the United States and in the world. Through a multidisciplinary course selection, students develop an understanding of aging from a variety of perspectives with a focus on how people age physically, cognitively, emotionally, and socially. Students are encouraged to analyze the historical and philosophical foundation from which policies, programs, and professional activities affecting the aged are developed, implemented, and evaluated. The purpose of GMM is to prepare students as they enter their career fields on the effects that the growing elderly population will have in every component of modern life.

Requirements

Academic policies related to Minors.

The minor in gerontology consists of completing five courses (20 credits).

- Special Topic courses on aging-related topics can be used for the minor if approved by the minor coordinator.
- Students must complete courses with a grade of C- or better and a 2.00 grade point average.

Code	Title	Credits
Required Courses		
EXSC 607	Biology of Aging	4
GERO 500	I'm Old, So What! An introduction to aging in the United States	4
Electives		
Select three courses from the following:		12
GERO 795	Independent Study [2]	
HDFS 625	Adult Development	
HDFS 707	Practicum [1]	
HHS 798	Special Topics	
HPE 601	Foundations of Lifetime Physical Activity	
NURS 506	Human Development, Interaction and Learning Across the Lifespan	
NURS 535	Death and Dying	
NUTR 400	Nutrition in Health and Well Being	
NUTR 600	Field Experience in Nutrition [1]	
NUTR 650	Life Cycle Nutrition	
NUTR 773	Clinical Nutrition	

NURS 601	Function and Wellbeing of Older Adults
OT 501	Developmental Tasks of Adulthood
PHIL 660	Law, Medicine, and Ethics
RMP 503	Therapeutic Recreation Rehabilitation Principles & Interventions
RMP 563	Recreation Management and Policy Practicum [1]
SOC 725	Social Demography
SW 702	Aging and Society
SW 740	Social Work Internship Experience [1]
SW 741	Social Work Internship Experience II [1]
Total Credits	**20**

1 Up to 4 credits from the practicum courses including HDFS 707 Practicum, NUTR 600 Field Experience in Nutrition, RMP 563 Recreation Management and Policy Practicum, SW 740 Social Work Internship Experience or SW 741 Social Work Internship Experience II can be used for GMM if a student did their internship at aging-related institutions.

2 GERO 795 Independent Study is not a required course but up to 4 credits can be used toward the minor. GERO 795 is used by students and faculty as an option for creating an individual experience relating to aging. A faculty member must approve and oversee (mentor) the student's work. Additionally, the minor coordinator must also approve of the proposal and retain a copy. A copy of the proposal and the final copy will be kept in the student's major academic folder.

Sport Management and Leadership

- Coaching Minor (p. 213)
- Sport Management and Leadership Major (B.S.) (p. 213)
- Sport Management Minor (p. 215)

Coaching Minor

https://www.unh.edu/program/minor/coaching

Description

The Coaching Minor is an interdisciplinary curriculum designed to provide students interested in coaching at the youth, high school or college levels with basic knowledge and skills necessary for competence in coaching. The minor consists of courses offered by several options within the Department of Kinesiology and Recreation Management and Policy. The proposed coursework lays a theoretical and practical framework for students interested in coaching.

Sport Management Leadership/Sport Studies majors are not permitted to minor in coaching.

Requirements

Academic policies related to Minors.

- Admission into the minor is based on successful completion of SML 565 Principles of Coaching (grade of C- or better), and a minimum GPA of 2.0.

Required Courses

Code	Title	Credits
SML 565	Principles of Coaching	4
SML 765	Advanced Topics in Coaching	4
SML 650D	Internship in Coaching [1]	2-4
Select a minimum of two of the following courses:		4
SML 565A	Clinical Practice in Coaching	2
SML 521	Theory of Coaching Basketball	2
SML 522	Theory of Coaching Football	2
SML 523	Theory of Coaching Ice Hockey	2
SML 525	Theory of Coaching Soccer	2
SML 528	Theory of Coaching Track and Field	2
Select at least one of the following:		4
KIN 505	Activity, Injuries and Disease	4
EXSC 527	Scientific Foundations of Health and Fitness	4
SML 560	Sport Psychology	4
RMP 560	Recreational Sport Management	4
SML 562	Sport Media Relations	4
HPE 675	Motor Development and Learning Across the Lifespan	4
SML 740	Athletic Administration	4
SML 780	Psychological Factors in Sport	4

1 Students will not be permitted to enroll in SML 650D Internship in Coaching, until they have completed 10 Credits toward the minor to include: SML 565 Principles of Coaching; and one of the applicable courses/electives and at least one theory/practical coaching class.

Sport Management and Leadership Major (B.S.)

https://www.unh.edu/program/bachelor-science/sport-management-leadership

Description

The Sport Management and Leadership Major at UNH prepares students for successful careers in the sport industry. The SML major meets the needs of the ever-changing sport marketplace, by balancing academic preparation through related coursework with extensive opportunities to gain experience in the sport industry. Analyzing and integrating the context/culture of sport is embedded throughout our curriculum and grounds students' preparation for careers in interscholastic, intercollegiate, and professional sport including sport marketing, event management, coaching, administration, and sport media/communication. SML also prepares students for graduate study in areas such as sport law, sport business, sport psychology, or sport communication.

Majors take a core of foundation courses, in addition to applied electives and choose one of three focus areas: Sport Marketing and Event Management, Coaching/Athletic Administration, or Sport Media/ Communication. In addition, a targeted internship experience is required since it is critical to career development. Students in this major are expected to complete a minor, cognate or a double major in a related field (e.g. business, communication, english/journalism, psychology, education) that ensures breadth and depth as well as appropriate knowledge and skills for entry into a sport-related career.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements [1]

Majors must earn a grade of B- or better in SML 580 Sport Industry, and a grade of C or better in an approved statistics course as well as each required Sport Management and Leadership course.

Code	Title	Credits
Core Courses		
SML 580	Sport Industry	4
SML 645	Leadership in Sport	4
SML 650C	Internship in Sport Management and Leadership	1-8
SML 741W	Social Issues in Contemporary Sports	4
SML 761	Career Development in Sport Management and Leadership [2]	4
PSYC 402	Statistics in Psychology [3]	4
or SOC 402	Statistics	
or ADMN 510	Business Analytics and Statistics	
or HMP 540	Statistics for Health and Human Service Professionals	
Focus Area		
Select a focus area from the below (12 credits):		12
Sport Marketing and Event Management		
SML 564	Introduction to Sport Marketing	4
Select 8 credits from the following:		
SML 630	Sport Facility and Event Management	4
SML 634	Sport Sponsorship and Sales	4
SML 764	Advanced Sport Marketing	4
SML 738	Sport Finance	4
SML 643	Social Media Marketing in Sport	4
Coaching/Athletic Administration		
SML 565	Principles of Coaching	4
Select 8 credits from the following:		
SML 565A	Clinical Practice in Coaching	2
SML 560	Sport Psychology	4
SML 630	Sport Facility and Event Management	4
SML 765	Advanced Topics in Coaching	4
SML 780	Psychological Factors in Sport	4
SML 521	Theory of Coaching Basketball	2
SML 523	Theory of Coaching Ice Hockey	2
SML 525	Theory of Coaching Soccer	2
SML 528	Theory of Coaching Track and Field	2
SML 740	Athletic Administration	4
Sport Media/Communication		
SML 562	Sport Media Relations	4
Select 8 credits from the following:		
SML 631	Sport Media Production	4
SML 643	Social Media Marketing in Sport	4
SML 564	Introduction to Sport Marketing	4
SML 630	Sport Facility and Event Management	4
Electives		
Select a minimum of 12 credits from the following: [4]		12
SML 568	Global Perspectives in Sport	4
SML 764	Advanced Sport Marketing	4
SML 738	Sport Finance	4
SML 634	Sport Sponsorship and Sales	4
SML 564	Introduction to Sport Marketing	4
SML 565A	Clinical Practice in Coaching	2
SML 560	Sport Psychology	4
SML 565	Principles of Coaching	4
SML 562	Sport Media Relations	4
SML 740	Athletic Administration	4
SML 521	Theory of Coaching Basketball	2
SML 522	Theory of Coaching Football	2
SML 523	Theory of Coaching Ice Hockey	2
SML 525	Theory of Coaching Soccer	2
SML 528	Theory of Coaching Track and Field	2
SML 561	History of American Sport and Physical Culture	4
SML 561W	History of American Sport and Physical Culture	4
SML 630	Sport Facility and Event Management	4
SML 631	Sport Media Production	4
SML 643	Social Media Marketing in Sport	4
SML 650C	Internship in Sport Management and Leadership	1-8
SML 693	Teaching Assistantship	2
SML 696	Independent Study	2-4
SML 765	Advanced Topics in Coaching	4
SML 780	Psychological Factors in Sport	4
SML 798	Special Topics	1-4
SML 761	Career Development in Sport Management and Leadership [2]	4

1 All students are required to complete an advisor approved minor, cognate or double major or 20 credits of coursework in a related field and approved in advance by faculty adviser.

2 Majors must complete a minimum of 150 hours of industry experience before they can take SML 761 Career Development in Sport Management and Leadership. Students must be enrolled as a sport managment and leadership major for one full semester before taking SML 761 Career Development in Sport Management and Leadership. See adviser for details.

3 All students are required to have a minimum grade of C in Statistics, PSYC 402, SOC 402, ADMN 510 or HMP 540, or an approved Statistics course.

4 Electives can include any courses listed within any focus area or the two additional courses listed below, including an additional 4 credits of internship. Credits applying to a declared focus area cannot also count as elective credits.

Internal transfer applicants to Sport Management and Leadership must have at least a 2.5 GPA as well as a minimum grade of C in Statistics (PSYC 402, SOC 402, ADMN 510 or HMP 540 or another approved statistics course) and a minimum grade of B- in SML 580 Sport Industry.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
SML 580	Sport Industry	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
Discovery/Inquiry Course		4
Discovery Course		4
Discovery Course		4
SML Focus Area Course		4
	Credits	**16**

Second Year		
Fall		
Discovery Course		4
Discovery Course		4
Discovery/Writing Course		4
SML Focus Area Course		4
	Credits	**16**
Spring		
Discovery/Quantitative Reasoning Course (Statistics)		4
Discovery/Writing Course		4
SML 645	Leadership in Sport	4
SML Focus Area Course		4
	Credits	**16**
Third Year		
Fall		
SML 741W	Social Issues in Contemporary Sports	4
SML Elective Course		4
SML Elective Course		4
Minor/Cognate Course		4
	Credits	**16**
Spring		
SML Core Course		4
SML Elective Course		4
SML or General Elective Course		4
Minor/Cognate Course		4
	Credits	**16**
Fourth Year		
Fall		
SML 761	Career Development in Sport Management and Leadership (Capstone)	4
SML Elective Course		4
Minor/Cognate Course		4
Minor/Cognate Course		4
	Credits	**16**
Spring		
Minor/Cognate Course		4
SML or General Elective Course		4
General Elective Course		4
General Elective Course		4
	Credits	**16**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

- SML students will understand the socio-cultural components of sport integrated throughout the curriculum while translating theory to practice in order to apply classroom knowledge in the sport setting.
- SML students will distinguish and employ effective leadership principles, management styles, and decision-making skills in sport organizations.
- SML students will identify and understand major issues in sport and how they can reflect as well as bring about change in society relative to diversity, equity, and inclusion.
- SML students will understand the importance of working collaboratively in order to effectively solve problems and reach organizational goals.
- SML students will be exposed to the basic operating principles in the sport industry in order to gain an understanding of the potential career paths.
- SML Students will be able to organize, apply and synthesize information and ideas while effectively expressing these in both oral and written form (critical and technical) through various contexts, technologies and platforms.
- SML students will develop, utilize and reflect on professional skills while demonstrating an ability to self-advocate in their career development.
- SML students will apply critical thinking and problem-solving skills to develop and analyze research data on issues related to the sport industry.

Sport Management Minor

https://www.unh.edu/program/minor/sport-management

Description

The Sport Management minor offers an opportunity for students outside of the major to strategically take classes in our SML curriculum, specifically designed to provide students with the basic knowledge of sport management. The minor consists of two required Sport Management courses and then a variety of options across our SML curriculum and within Paul College.

Admission into the minor is based on successful completion of SML 580 Sport Industry and a minimum GPA of 2.0. Please contact sophia.min@unh.edu for additional information.

Requirements

Academic policies related to Minors.

- This minor may not be declared with the following majors: Sport Management and Leadership/Sport Studies (B.S.).

Required Courses

Code	Title	Credits
Two Required Courses		
SML 580	Sport Industry [1]	4
SML 564	Introduction to Sport Marketing	4
Select two courses from the following:		
SML 630	Sport Facility and Event Management	4
SML 634	Sport Sponsorship and Sales	4
SML 738	Sport Finance	4
SML 740	Athletic Administration	4
SML 764	Advanced Sport Marketing [2]	4
Select one course from the following:		
PAUL 450	Personal Finance	4
MGT 535	Organizational Behavior	4
or ADMN 575	Behavior in Organizations	

MKTG 649	Foundations of Personal Selling	4
ECON 676	Economics of Sports	4

1 SML 580 Sport Industry should be the first class students take in this minor. Additionally, enrolling in this class is when a student fills out the intent to minor form.

2 If not taken as one of the two required courses.

College of Liberal Arts

Michele Dillon, Dean
Jenni Cook, Associate Dean

It is the purpose of the College of Liberal Arts, as a center of learning, research inquiry, and scholarship, to help students achieve an understanding of the heritage of civilization and to educate them in the traditions of the past and realities of the present so they may recognize and act upon their obligations to the future.

The college seeks to meet the educational needs of each student through the development of interests and skills, which, combined with the individual's potential, make possible a richer, more useful, and more purposeful and meaningful life.

Degrees

Bachelor of Arts

These programs primarily provide a broad liberal education along with depth in a major. Requirements for the bachelor of arts degree and information regarding the majors that lead to a bachelor of arts are outlined under Programs of Study (p. 219).

Bachelor of Fine Arts

This curriculum provides training for students who plan to enter a professional graduate school. Requirements for the bachelor of fine arts degree are outlined under Programs of Study/Art and Art History (p. 228).

Bachelor of Music

This curriculum provides professional training in performance, composition, music education, and music pre-teaching and allows students to develop their talent to a standard equivalent to the one achieved at conservatories of music. Requirements for the bachelor of music degree and information regarding the curriculum are presented in Programs of Study/Music (p. 295). Degrees include Music Education, Pre-Teaching, Performance and Composition.

Bachelor of Science

This curriculum provides strong preparation for entry into graduate programs in neuroscience, behavior, pharmacology and medicine. Requirements for the bachelor of science degree and information regarding this major are outlined under Programs of Study/Neuroscience and Behavior.

The homeland security major (p. 683), offered on both the Durham and Manchester campuses, also leads to a bachelor of science degree.

Combined Programs of Study

In addition to pursuing a single major, students may combine programs of study as follows:

Minors: Students may pursue one or more minors, each typically comprised of 5 courses. Minors are available in nearly every discipline within the College of Liberal Arts.

Cognates: Students may pursue one or more cognates, each typically comprised of 3 courses and intended to develop career-oriented skills. The list of cognates and their requirements are found under Cognates (p. 238).

Second (Double) majors: Students may choose to fulfill the requirements of two dissimilar major programs.

Dual majors: Students may choose to fulfill the requirements of a dual major, typically comprised of 8 courses. Dual majors are designated programs that must be paired with another major of any discipline. Dual majors in the College of Liberal Arts are educational studies (p. 252), humanities (p. 283), global studies (p. 327) and justice studies (p. 289).

See College of Life Sciences and Agriculture for information about the Sustainability dual major.

Student-designed majors: Under special circumstances, students may design their own majors.

Dual-degree programs: Students may choose to fulfill the requirements of two separate degrees, such as a B.A. and a B.S.

Interdisciplinary opportunities: See the Interdisciplinary Studies web page for the complete list of interdisciplinary programs within the College of Liberal Arts.

Proficiency in a Foreign Language

Please see the explanation of this University requirement under Foreign Language Requirement (p. 45): Bachelor of Arts.

Within the College of Liberal Arts, only those students majoring in education, linguistics, philosophy, psychology, sociology, theatre and dance, or women's and gender studies may use American Sign Language (ASL) to fulfill their foreign language proficiency requirement. English teaching majors who plan to pursue deaf studies may petition the English department to use ASL to fulfill their foreign language proficiency requirement.

COLA Study Abroad

cola.unh.edu/cola-study-abroad

The College of Liberal Arts offers a number of managed study abroad programs that are designed and administered by college faculty and the College of Liberal Arts. These programs provide opportunities for liberal arts students as well as students in other colleges to experience and learn about different cultures and, in non-English-speaking countries, to increase proficiency in a foreign language.

Because the college administers these programs, registration, finances, and other logistics are streamlined and simple. Students pay UNH tuition and a single program fee, which covers housing, excursions, and, in some cases, board. Most UNH student fees are waived with the exception of the technology fee, a study abroad administration fee, and an international travel insurance fee. Students are eligible for federal financial aid for the semester-long programs.

Please see the list of eligibility requirements under Study Abroad Programs (p. 737).

To learn more about any of the programs, contact the program director listed on the website for each program or the Global Education Office at study.abroad@unh.edu.

Career and Professional Success

cola.unh.edu/careers

The College of Liberal Arts is committed to helping students achieve success in their career and professional endeavors. From one-on-one career counseling appointments to internship placements and employer visits to campus, the Career and Professional Success office supports students with the tools and resources to secure meaningful, impactful, and rewarding careers.

Research Centers

Center for the Humanities

cola.unh.edu/center-humanities

The Center for the Humanities fosters excellence in the humanities, broadly conceived, at the University of New Hampshire. Center resources and programs support faculty research, encourage external grant and fellowship submissions, facilitate reflection and inquiry across the University community and beyond, create interdisciplinary initiatives in many forms, and undertake special projects to raise the visibility of the humanities. To accomplish this, the center endeavors to support the highest quality work by UNH humanities faculty, to build productive collaboration among faculty, to create singular projects that advance its goals, and to be a center of innovation, planning and inspiration for the humanities at the University of New Hampshire. By pursuing its goals, the center supports the University's research mission in particular, as well as its academic plan.

The center is the sponsor of the Saul O Sidore Memorial Lectures and the James H. and Claire Short Hayes Chair in the Humanities.

Crimes Against Children Research Center

www.unh.edu/ccrc

The Crimes Against Children Research Center (CCRC) is concerned with all forms of crimes against children and adolescents, from birth through age 17, both within and outside the family, both known and unknown to law enforcement. These include criminal acts as defined by law, such as sexual assault, abduction, theft, robbery and aggravated assault against children. But it also includes child abuse in all its forms —physical, sexual, emotional—and child neglect, as well as child-to-child violence, such as peer and sibling assaults and bullying. It also includes indirect victimization, where children witness or are affected by the crime victimization of a family member or friend.

The CCRC, created in 1998, grew out of and expands upon the work of the UNH Family Research Laboratory, which has been devoted to the study of family violence and related topics since 1975. Associated with the center is an internationally recognized group of experts who have published numerous books and articles concerning the incidence and impact of violence against children.

CCRC staff has contributed to many pioneering national crime studies, including National Incidence Study of Missing, Abducted, Runaway and Thrownaway Children; National Family Violence Survey; National Youth Victimization Prevention Survey; National Survey of Sexual Abuse in Day Care; Developmental Victimization Survey; Youth Internet Safety Surveys; and Multisite Evaluation of Children's Advocacy Centers.

The CCRC is directed by David Finkelhor, who is also the director of the Family Research Laboratory and professor of sociology at the University of New Hampshire. Finkelhor has been researching criminal violence against children since 1978 and is the author and editor of 12 books and more than 100 articles on the subject.

Family Research Laboratory

cola.unh.edu/family-research-laboratory

Since 1975, the Family Research Laboratory (FRL) has devoted itself primarily to understanding family violence and the impact of violence in families. As public and professional interest in family violence has grown, so has the need for more reliable knowledge. The FRL seeks to fill that need through comprehensive literature reviews, new theories and methodologically sound studies. Researchers at the FRL pioneered many of the techniques that have enabled social scientists to estimate directly the scope of family violence. These efforts have brought international recognition to the FRL.

The FRL is unusual among research centers in the field because it addresses all aspects of the family, violence and abuse. Topics undertaken by the FRL include physical abuse of children, corporal punishment of children, sexual abuse of children, physical abuse of spouses, dating violence, abuse of the elderly, intra-family homicide, rape and marital rape, violence between siblings, peer victimization of children, pornography, and missing and abducted children. This variety of topics is a result of beliefs that have guided FRL research: that various forms of family problems are interrelated, that conflict is as basic to family life as are love and cooperation, and that much of the conflict and violence in the world outside the family can be traced to roots within the family. This holistic view of family violence has contributed both diversity and richness to the FRL's work.

The FRL's prominence in the field is in part a result of the large number, variety and scope of its publications. In a span of 10 years, FRL staff members have published more than 45 books and more than 740 articles on family violence.

The FRL is housed in a suite of offices in McConnell Hall The FRL is directed by David Finkelhor, professor of sociology and director of the Crimes Against Children Research Center.

The Survey Center

https://cola.unh.edu/unh-survey-center

The UNH Survey Center is a full-scale, non-partisan academic survey research center, committed to providing university researchers, government and business leaders, and private organizations with reliable information about public attitudes concerning important policy matters. It is nationally known for its public opinion and political polling for CNN, Fox News and WMUR-TV.

The UNH Survey Center has conducted survey research projects at the University of New Hampshire since 1986: state, regional and national general population surveys based on probability sampling; surveys that target specific populations; surveys that utilize complex stratified sampling techniques; and panel studies. The Survey Center conducts telephone, mail and web surveys, as well as focus groups and other qualitative research projects.

The Survey Center is directed by Andrew E. Smith, who is also associate professor of practice in political science.

Academic and Cultural Centers

new hampshire humanities collaborative

cola.unh.edu/new-hampshire-humanities-collaborative

The New Hampshire Humanities Collaborative (NHHC) is a dynamic hub of faculty and undergraduate student research, pedagogical activity, and

community engagement. Faculty and students already working on or interested in projects that engage with social inequality are invited to connect with NHHC initiatives and resources. Additionally, we broaden faculty and student engagement in these thematic areas by incentivizing new and continuing research with external funding support. NHHC also uses its expertise to facilitate community and industry partnerships, develop internships, and expand collaborative relationships with community colleges in the region.

NHCC draws on funding from an Andrew W. Mellon Foundation grant and College of Liberal Arts donor gift funds. These funds enable faculty and students to pursue projects that are effective in addressing today's pressing societal problems. A key component of this work is a collaborative partnership between the College of Liberal Arts at UNH, the state's flagship public and research-intensive university, and the Community College System of New Hampshire's (CCSNH) seven community colleges.

https://cola.unh.edu/

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Africana Studies (AFAM)

Programs

- Africana Studies Minor (p. 219)

Africana Studies Minor

https://www.unh.edu/program/minor/africana-studies

Description

The Africana studies minor encompasses multidisciplinary, comparative and global research with and about peoples and cultures of Africa and its Diasporas. Diaspora is defined by dispersals and mobilities of communities, the result of exploration, migration and or coercion. African Diaspora communities exist everywhere, from Europe, the Middle East and Asia, to South and North America. We consider how Africana heritage and culture is shaped by these long-standing, long-range connections between diverse places, making our focus importantly geographic and our content intrinsically cosmopolitan.

We foreground the experiences of African, African Diaspora and African American communities in our research, teaching and engagement. We consider how understanding exceptional experiences and histories of exclusion and communion can inform work for building a more sustainable, equitable and just world.

Blackness is a primary root for study and practice in the minor at UNH. Notwithstanding complex historic antecedents of race and racism, we consider how Blackness (/blackness) emerged as racial phenomena in the fifteenth century through global commodity capitalism. In this process, the modern enslavement and worldwide dispersal of African peoples arguably made up the first historic articulations of Blackness, the first major instance of globalization and one of the worst tragedies of human history with which we still reckon today. Throughout this history, the meanings and operations of race and racism in local contexts have not been altogether uniform but nonetheless reveal common dynamics of Black peoples' marginalization and structural dispossession of sociocultural, political and material resources.

In this root, students learn about varieties of historic and contemporary Blackness and what it means to be Black (/black): as lived experience, categorical attribution and aspect of intersecting identities; as creatively spiritual, aesthetic, and discursive expression and media; as antiracist reclamation and foundation for agency, activism and sociopolitical mobilization; and as a fount for queerness, love, joy and liberation. Our students and faculty consider how Black experiences are multidimensional and multivalent, subject to ongoing clarification within and among diverse communities worldwide, and differently and lyrically voiced and performed for multiple means and ends. We consider how Blackness entails an existential and practical quest for freedom from oppressive orders and boundary-making.

The program has a strong focus on coursework and research on African American and or Black peoples in the United States, as their cultures and history have been integral to the development of the nation-state and also highlight the country's problems and promises. The program also offers many courses on the cultures and history of Africa and its other Diaspora communities. Our courses range from the humanities to the social and natural sciences, and our approaches and methods are applicable to virtually all areas of study at UNH. Students are encouraged to take courses from a variety of disciplines. The minor therefore is designed to serve the needs of all students, regardless of their background, and to complement their work in their major fields of study.

We maintain close intellectual and practical solidarities with UNH's Center for the Humanities, Department of Women's and Gender Studies, and other interdisciplinary minor programs in American Studies, Native American and Indigenous Studies, Latin American, Latinx, and Caribbean Studies, Asian Studies, Queer Studies, and Race and Ethnic Studies. Our program faculty also maintain ties with Black educational and community organizations, such as the Seacoast African American Cultural Center, Black Heritage Trail of New Hampshire, Black Lives Matter chapters, and others in the region.

The introductory course is meant to provide students with a general understanding of subjects and areas within the related fields African, African Diaspora, African American and Black studies. Electives enable students to explore their interests and or develop greater understanding and synthesis of these subjects and areas. The upper-level course requirement is meant to be a culmination of a student's work in the minor and key conversations with program faculty about future research and graduate study, community engagement, and careers. Students should arrange to meet with faculty teaching this course early in the semester to establish goals for this culminating experience. Study abroad credits may also count with permission from the coordinator or other program faculty. A list of approved courses are posted each semester online.

Students can also pursue independent study and internship options as well for their elective or upper-level course requirement, with on-campus or community organizations such as the UNH Beauregard Center, Black Students Union, African Student Association, Seacoast African American Cultural Center, Black Heritage Trail of New Hampshire or local chapters of national organizations. These options are supervised by program faculty and may be taken under the AFAM or other departmental codes.

Requirements

Academic policies related to Minors.

Minor Requirements

The minor consists of completing five courses (20 credits).

Code	Title	Credits
Introductory Course		
Select one course from the following: [1]		4
ANTH 500	Peoples and Cultures of the World (Only topic D: Sub-Saharan Africa)	
GEOG 550	Sub-Saharan Africa: Environmental Politics and Development	
HIST 505	African American History	
HIST 588	History of Modern Africa: 1870 to the Present	
Electives		
Select 12-credits from the following pre-approved elective courses:		12
CLAS 550B	Identities and Difference in the Ancient World: Slaves and Masters	
CLAS 551	Race, Ethnicity, Class & Classics	
CMN 567	Gender, Race, and Class in the Media	
ENGL 440A	Honors/On Race in Culture and Society	
ENGL 550	Introduction to the Literature and Culture of Race	
ENGL 581	Reading the Postcolonial Experience	
ENGL 693	Special Topics in Literature (Only topic: African American Writers)	
ENGL 778	Race and Gender in Film and Popular Culture	
ENGL 787	English Major Seminar (Only topic: Slavery and Culture)	
GEOG 402	World Regions: Asia and Africa	
HIST 440A	Martin Luther King, Jr., and the Struggle for Racial Justice	
HIST 440D	Honors/Citizens and Persons	
HIST 611	Civil War Era	
HIST 690	Seminar: Historical Expl (Only topic: Race in 20th Century America)	
HDFS 757	Race, Class, Gender, and Families	
MUSI 460	Jazz Band [2]	
MUSI 463	Jazz Combo [2]	
MUSI 562	Jazz Piano [2]	
MUSI 563	Jazz Guitar [2]	
MUSI 762	Jazz Piano [2]	
MUSI 763	Jazz Guitar [2]	
PHIL 780	Special Topics (Only topic: Race, Gender and Social Justice)	
SOC 530	Sociology of Race and Ethnicity	
SW 630	Anti Oppressive Practice in Social Work	
WGS 401W	Introduction to Women's Studies	
WGS 405	Gender, Power and Privilege	
WGS 444A	Race Matters	
WGS 505	Survey in Women's Studies	
WGS 798W	Colloquium	
Upper-Level Course		
Select one course from the following: [1, 3]		4
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa	
ENGL 797R	Special Studies in Literature (Race & Racial Theories)	
HIST 600	Explorations (Only topic: Black and Indigenous NH)	
HIST 797	Colloquium (Only topic: Slavery, War and Emancipation)	
SOC 645	Class, Status and Power	
Total Credits		**20**

1. Course must be taught by AFAM program faculty member.
2. May require audition with the Music Department.
3. Internship and other courses with program faculty may also apply with permission.

American Studies (AMST)

Programs

- American Studies Minor (p. 221)

American Studies Minor

https://www.unh.edu/program/minor/american-studies

Description

American studies is the interdisciplinary examination of American life and culture at regional, national, and international scales. It integrates perspectives from a wide variety of disciplines, including history, English, communications, political science, geography, sociology and the arts.

At UNH, the American studies minor is an individualized program of study that allows each student to choose from a broad range of courses offered by several different departments that best match their interests and needs. It is intended to encourage students with particular interests in the United States to develop those interests and learn more about the country from a variety of perspectives.

Requirements

Academic policies related to Minors.

Students must complete five courses approved to satisfy minor requirements as follows:

- At least one course must concentrate on issues of race, gender, or ethnicity.
- No more than three courses may be at the 400 or 500 level.
- No more than two courses may be taken offered by the same department.

Students must earn a C- or better and maintain a 2.0 grade point average in all courses taken to complete the minor.

Code	Title	Credits
Approved Courses		
ANTH 697	Special Topics	4
CMN 505	Analysis of Popular Culture	4
CMN 607	Persuasion in American Politics	4
ENGL 738	Asian American Studies	4
HIST 405	History of Early America	4
HIST 406	History of the Modern United States	4
HIST 410	Historic Survey of American Civilization	4
HIST 600	Explorations	4
HIST 603	European Conquest of North America	4
HIST 611	Civil War Era	4
HIST 613	American Ways of War	4
HIST 618	American Environmental History	4
HIST 620	Foreign Relations of the United States	4
ITAL 444A	Italians Come to America: Representing Emigration and Immigration on Both Sides of the Atlantic	4
MUSI 405	Survey of Music in America	4
POLT 402	American Politics and Government	4
POLT 403	United States in World Affairs	4
POLT 500	American Public Policy	4
POLT 508	Supreme Court and the Constitution	4
POLT 523	American Political Thought	4
RMP 511	Issues of Wilderness and Nature in American Society	4
THDA 450	History of Musical Theatre in America	4
WGS 405	Gender, Power and Privilege	4

Anthropology (ANTH)

Anthropology is a field of visionaries, makers and collaborators, taking a critical, creative and holistic approach to the study of humankind. Our faculty teach hands-on courses in archaeology and sociocultural, applied, biological and forensic anthropology, reflecting our faculty members' research in the Americas, Europe, Africa, the Middle East and Central Asia. Through coursework, fieldwork and study-abroad experiences, students gain life-long learning skills that prepare them for success in cross-cultural understanding and communication, working for diverse organizations and tackling complex social issues in today's global world. Our students are employed in a range of areas such as health care, business, community development, cultural resource management and museums, and education.

https://cola.unh.edu/anthropology

Programs

- Anthropology Major (B.A.) (p. 221)
- Anthropology Minor (p. 224)

Faculty

Anthropology Department Faculty

Anthropology Major (B.A.)

https://www.unh.edu/program/bachelor-arts/anthropology

Description

Anthropology equips learners with skills and theories that explain what makes us human culturally and biologically across time and space. Anthropology also encourages a global perspective on the human condition that educates about how and why human societies and culture changes, similarities and differences between humans and other species and beings, and how our communities, including those of New Hampshire, are connected to the wider globalized world. Further, anthropology fosters a deep view of human adaptation and behavior, from our evolutionary and historic past to the present, demonstrating our past pitfalls and successes as means to create a sustainable future world..

Students take a range of introductory to advanced courses courses involving hands-on and experiential learning in our main areas of focus: cultural and medical anthropology, biological and forensic anthropology, and archaeology. Advanced courses provide opportunities for students to pursue intensive studies and technical training in focused methods and topics, and we pride ourselves on close faculty-student contact in lab and seminar courses. We encourage students' exploration of complementary programs across UNH, world languages, travel through national and international study-away opportunities, and service learning and collaboration with community-based organizations. Our discipline is an intellectual home for students who have broad and diverse interests in what it means to be human.

All anthropology majors graduate with foundational skills in critical and creative thinking driven by curiosity, research design and analysis, and multicultural competency. Students also develop transferable skills that reflect their focus in our diverse discipline and can include: intercultural communication; user experience and design, market research, and patient-oriented services based in ethnography; and lab- and field-based forensic and archaeological research involving excavation, recovery and use of drone, surveying, and modelling technologies.

Anthropology offers a strong foundation for a wide range of careers. Our alumni find successful careers in a range of areas, including: public policy and local government, forensic investigation and identification, clinical and public health practice, business, public relations and marketing, K-12 and adult education, social work, research-driven advocacy, community development, cultural resource management, museum work, consulting, and more.

To declare a major in anthropology, students must have completed at least one introductory level anthropology course at the 400 or 500 level with a grade of C or better.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Majors must complete a minimum of 40 credits in anthropology with grades of C or better and in accordance with the below requirements. The required minimum overall GPA in major coursework is 2.0.

Code	Title	Credits
Required Courses		
ANTH 411	Global Perspectives on the Human Condition: An Introduction to Anthropology	4
ANTH 412	Broken Pots and Buried Cities: Introduction to World Archaeology	4
or ANTH 415	The Human Story: Evolution, Fossils and DNA	
ANTH 500	Peoples and Cultures of the World	4
or ANTH 501	World Archaeological Cultures	
ANTH 513	Ethnographic Methods	4
or ANTH 514	Method and Theory in Archaeology	
ANTH 611	History of Anthropological Theory	4
Electives		
One additional course numbered 500 or above		4
Three additional courses numbered 600 or above		12
Capstone Requirement		
ANTH 750		4
or ANTH 785	The Anthropology of Dreams and Dreaming	
or ANTH 797	Advanced Topics	
Total Credits		**40**

Additional Information

Students declaring the major in anthropology are expected to make steady progress toward fulfillment of major requirements. Typically, this means taking at least one ANTH course per semester until all of the requirements have been met. Very rarely, and only in specific circumstances such as a complex transfer of ANTH-related credits from another school, will an exception to this policy be made and only in student consultation with their advisor.

Candidates for any UNH degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program.

Discovery Program Requirements
Anthropology majors may use one major-required ANTH course to satisfy one Discovery category requirement. These only include: ANTH 411, ANTH 412, ANTH 415, ANTH 500, or ANTH 501.

Capstone Requirement
The Capstone Requirement for the anthropology major also fulfills the Discovery Capstone Requirement, and it must be fulfilled in a Seminar format in any one the following courses: ANTH 750, ANTH 785, or ANTH 797. Students may not substitute ANTH 700 or ANTH 795, ANTH 796 courses for their Capstone Requirement, although these can count as electives for the major.

Bachelor of Arts Language Requirement
Anthropology majors must also satisfy the UNH Bachelor of Arts Language requirement. Anthropology majors may take American Sign Language to satisfy the language requirement.

Interdisciplinary Dual Majors or Minors
Many anthropology majors choose to pursue interdisciplinary dual majors or minors at UNH that cross-list ANTH courses, including Justice Studies (JUST), Humanities (HUMA), Sustainability (SUST), International Affairs (IA), Global Studies (GS), and Forensics. Up to eight credits of ANTH courses (normally two courses) will be permitted to count toward both the anthropology major and the dual major program. Students must carefully plan ahead with their advisors in both majors. Up to one (1) course, internship, or experience not based in Anthropology may be counted as an elective for the Anthropology major, and only with the approval of the student's advisor and department chair.

Study Abroad
Students are also encouraged to explore study abroad options through the UNH Global Education Abroad office. Anthropology majors may acquire up to eight credits (normally two courses) toward their major requirements while studying abroad. Additional courses can be accepted for general credits at UNH. Majors must complete ANTH 513 or ANTH 514, ANTH 611, and their 700-level Senior Seminar on-campus. These cannot be completed on study abroad.

Internships
Internships (ANTH 700, 1-4 credits) and independent study courses (ANTH 795 / ANTH 796, 1-4 credits) are supervised primarily by a faculty member and are developed mutually between a student and faculty. Students should have previously taken at least one course with them, and unless faculty have a grant or an external funding partner, internships for credit that are primarily directly by faculty are not paid. To support their research and supplies related to internships or independent studies, students should seek out opportunities from the Hamel Center for Undergraduate Research. Students are encouraged to meet with UNH Career and Professional Success (CaPS) to explore paid, pre-professional internships with organizations outside of UNH, such as local businesses, nonprofits, and government agencies. Additionally, students should

contact a faculty member to discuss the possibility of receiving academic credit or secondary supervision for their internship.

Honors-in-Major

An Honors-in-Major option is available and separate from the UNH Hamel Honors & Scholars College options. Honors-in-Major requires completion of ANTH 699H Honors Senior Thesis, as well as undertaking any two 600- or 700-level ANTH courses designated as Honors by instructor approval. Students complete ANTH 699H Honors Senior Thesis across two semesters for eight credits total. Students may also choose to pursue their research and complete a two semester, eight credit non-Honors senior thesis (ANTH 699 Senior Thesis). Exceptions to the eight credit-rule only pertain to a UNH Hamel College-related Honors Senior Thesis (also ANTH 699H Honors Senior Thesis) which is supervised by Anthropology faculty and may be taken by any UNH student but only taken once for four credits. Only four credits of any thesis will count as an ANTH 600-level major elective requirement toward the BA degree. Please consult with both your Anthropology advisor and the UNH Hamel Honors & Scholars College directors.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
ANTH 411	Global Perspectives on the Human Condition: An Introduction to Anthropology	4
Discovery Course		4
Language Course		4
First Year Seminar		1
	Credits	**17**
Spring		
ANTH 412 or ANTH 415	Broken Pots and Buried Cities: Introduction to World Archaeology or The Human Story: Evolution, Fossils and DNA	4
ANTH 500 or ANTH 501	Peoples and Cultures of the World or World Archaeological Cultures	4
Language Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
ANTH 513 or ANTH 514	Ethnographic Methods or Method and Theory in Archaeology	4
ANTH 500-level Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
ANTH 600-level Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Third Year		
Fall		
ANTH 611	History of Anthropological Theory	4
ANTH 600-level or higher Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
ANTH 600-level or higher Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Fourth Year		
Fall		
ANTH 750 or ANTH 785 or ANTH 797	or The Anthropology of Dreams and Dreaming or Advanced Topics	4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
ANTH 699	Senior Thesis (optional)	4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**129**

[1] Students can explore a second major, minor or general electives.

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate ability to conduct anthropological research: to collect primary and secondary source data in the observation, documentation, or excavation of human actions, languages, remains, and or material artifacts.
- Master the ability to write with an anthropological lens: to critically analyze data with respect to historical and current anthropological theories and perspectives, and to construct persuasive arguments.
- Exhibit skills in presentation of anthropological research: in writing (ethnography, technical reports, and other genres), inter-personal and public speaking, and or data visualization (graphic illustration, exhibition, mapping, or modeling, for example).
- Demonstrate the knowledge or ability to collaborate with research partners and communities as part of a commitment to public, applied, engaged, or activist anthropology and archaeology.

- Demonstrate the ability to think comparatively about diversity and inequality across the global as well as within a specific social context, and to apply anthropological methods, perspectives, and theories to the world around them.

Anthropology Minor

https://cola.unh.edu/anthropology/program/minor/anthropology

Description

Anthropology equips learners with skills and theories that explain what makes us human culturally and biologically across time and space. Anthropology also encourages a global perspective on the human condition that educates about how and why human societies and culture change, similarities and differences between humans and other species and beings, and how our communities, including those of New Hampshire, are connected to the wider globalized world. Further, anthropology fosters a deep view of human adaptation and behavior, from our evolutionary and historic past to the present, demonstrating our past pitfalls and successes as means to create a sustainable future world.

Students declaring a minor in anthropology are invited to take a range of introductory to advanced courses involving hands-on and experiential learning in our main areas of focus: cultural and medical anthropology, biological and forensic anthropology, and archaeology. Advanced courses provide opportunities for students to pursue intensive studies and technical training in focused methods and topics, and we pride ourselves on close faculty-student contact in lab and seminar courses. Students who declare a minor find it complementary to a variety of programs across UNH's colleges, including biological sciences and health-related fields, psychology, communication, business, international affairs, history, and more.

Anthropology minors develop foundational skills in critical and creative thinking driven by curiosity, research design and analysis, and multicultural competency. Students may also develop transferable skills that reflect their focus in our diverse discipline and can include: intercultural communication; user experience and design, market research, and patient-oriented services based in ethnography; and lab- and field-based forensic and archaeological research involving excavation, recovery and use of drone, surveying, and modelling technologies.

Anthropology offers a strong foundation for a wide range of careers. Our alumni find successful careers in a range of areas, including: public policy and local government, forensic investigation and identification, clinical and public health practice, business, public relations and marketing, K-12 and adult education, social work, research-driven advocacy, community development, cultural resource management and museum work, consulting, and more.

Requirements

The minor consists of completing five courses (20 credits) in Anthropology (ANTH).

Academic policies related to Minors.

Required Courses

Code	Title	Credits
Select one ANTH course numbered 600 or above		4
Select four elective ANTH courses		16
Total Credits		**20**

Arabic (ARBC)

Programs

- Arabic Minor (p. 224)

Arabic Minor

https://www.unh.edu/program/minor/arabic

Description

There are 26 countries where Arabic is the official or co-official language, extending beyond the Middle East region. The Arabic minor facilitates students' acquisition of skills in this critical language (speaking, listening, reading and writing), as well as cross-cultural competence. The linguistic skills achieved in the successful completion of this minor will be at the Advanced or Intermediate-High Proficiency level in Arabic as defined and measured by the American Council on the Teaching of Foreign Languages (ACTFL) Proficiency Guidelines. This minor provides a strong complement to many majors and will prepare students to compete for national fellowship opportunities, graduate school, the job market — any opportunity in which proficiency in Arabic is required or preferred.

Requirements

Academic policies related to Minors.

The Arabic minor consists of completing five courses (20 credits).

Code	Title	Credits
Required Courses		
ARBC 503	Intermediate Arabic	4
ARBC 504	Intermediate Arabic	4
ARBC 631	Advanced Arabic I	4
ARBC 632	Advanced Arabic II	4
Elective Course		
Select one course from the following: [1]		4
ARBC 425	Introduction to Arabic Culture	
HIST 585	Medieval Islam	
HUMA 511A	Medieval Humanities: Rise of Global Empires [2]	
HUMA 511B	Medieval Humanities: Rise of Global Empires [2]	
HUMA 511C	Medieval Humanities: Rise of Global Empires [2]	
POLT 559	Comparative Politics of the Middle East	
Total Credits		**20**

[1] Or another course closely related to the minor area of study with approval of faculty.

[2] Please check with the contact for the minor to make sure that the topics covered are sufficiently relevant to Arabic studies.

Students may take equivalent courses while studying abroad to satisfy any of the courses required for the minor.

Art and Art History (ARTS)

The courses offered by the Department of Art and Art History provide an opportunity, within the liberal arts framework, for students to acquire a thorough knowledge of the basic means of visual expression, to study intensively the history of art, or to prepare themselves for a career in art teaching. In addition, these courses offer foundation experience for students who are interested in art but are majoring in other departments in the University. The Department of Art and Art History offers programs leading to a bachelor of arts degree in the arts with options in studio art, studio art/art education or art history and a bachelor of fine arts degree in studio art. Certification for art teaching in the public schools is offered in cooperation with the Department of Education (see Education, under Programs of Study).

The University reserves the right to retain selections from a student's work for a period of not more than two years.

Double Option in The Arts

Students may earn a B.A. degree in the arts with both a studio art option and an art history option provided the requirements for each option are met. No more than 8 credits used for one option may be used for the second option. These 8 credits will be in Introductory Drawing and Introduction to Art History.

Minors in the Department of Art and Art History

Students must receive a minimum grade of C- in all required courses. For art majors, only two courses from the art and art history major requirements can be applied toward the minor.

A maximum of two courses (8 credits) may be transferred from another accredited institution, provided UNH has accepted them as transfer credits. Transfer courses must be a minimum of three credits. Students with transfer courses that are accepted with less than four semester credits must still meet the credit requirement for completion of the minor.

https://cola.unh.edu/art-art-history

Programs

- Arts Major: Art History Option (B.A.) (p. 225)
- Arts Major: Studio Art Option (B.A.) (p. 226)
- Arts Major: Studio Art/Art Education Option (B.A.) (p. 227)
- Fine Arts Major (B.F.A.) (p. 228)
- Architectural Studies Minor (p. 230)
- Art History Minor (p. 230)
- Art Minor (p. 230)
- Design Studies Minor (p. 230)
- Studio Arts Minor (p. 231)
- Art History, Design, and Computer Sciences Cognate (p. 238)

Faculty

Art & Art History Department Faculty

Arts Major: Art History Option (B.A.)

https://www.unh.edu/program/bachelor-arts/arts-art-history

Description

The art history curriculum provides a comprehensive, in-depth study of Western art from the ancient world to the present as well as some exposure to non-Western cultures and artistic traditions. All courses in the program teach basic skills of interpretation and critical analysis within the framework of broad cultural perspectives that connect the visual arts to larger historical developments. They also teach good writing and research skills. In addition, art history majors typically branch out into other fields, such as history, literature and foreign languages. By the time they graduate, most majors are well equipped to pursue such traditional careers in the field as museum and gallery work, teaching, publishing or librarianship. But because art historical education is so broad, it also prepares students for a variety of other, more flexible options, such as law, business or architecture.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Students must complete a minimum of 10 courses (40 credits) for the major requirements, plus a capstone course as outlined below.
- Major courses must be completed with a minimum grade of C-. The required minimum overall GPA in major coursework is 2.0.
- Art history majors may use two major-required courses to satisfy two Discovery Program category requirements.

Code	Title	Credits
Required Courses		
ARTH 400	Topics in Art History	4
or ARTH 440A	From Digging to Digital: Preserving and Displaying the Past	
or ARTH 444	Mona Lisa to Much Ado About Nothing: An Introduction to Renaissance Culture	
or ARTH 444B	Art and Money	
or ARTH 474	Introduction to Architectural History	
or ARTH 480	Introduction to Art History	
or ARTH 485	Introduction to Global Art History	
ARTS 532	Introductory Drawing [1]	4
ARTH 799	Seminar in Art History	4
Art History Courses		
Six (6) courses total from the areas below (only one 500-level course may be taken).		
Pre-Renaissance - Select one course from the following:		4
ARTH 501	Introduction to Mediterranean Archaeology	
ARTH 674	Greek Art and Architecture	
ARTH 678	Romanesque and Gothic Art	
Renaissance/Baroque - Select one course from the following:		4

ARTH 583	Baroque Art: Realism, Caricature, Shock	
ARTH 681	Early Renaissance Art	
ARTH 682	The High Renaissance	
Modern Art - Select one course from the following:		4
ARTH 686	Sex and Sensuality in 18th-Century Art	
ARTH 688	Histories of Late 19th & 20th Century European Modernism	
ARTH 694	Vision and Modernity: From Panorama to Early Film	
Electives: Pre-Renaissance, Baroque or Modern Art		12
Select three courses from the following:		
ARTH 501	Introduction to Mediterranean Archaeology	
ARTH 502	Ancient Pompeii and the Bay of Naples	
ARTH 583	Baroque Art: Realism, Caricature, Shock	
ARTH 674	Greek Art and Architecture	
ARTH 678	Romanesque and Gothic Art	
ARTH 681	Early Renaissance Art	
ARTH 682	The High Renaissance	
ARTH 686	Sex and Sensuality in 18th-Century Art	
ARTH 694	Vision and Modernity: From Panorama to Early Film	
Capstone		
ARTH 795	Understanding Art History: An In-Depth Overview	4
Total Credits		**40**

[1] Art history students receive preferential placement in this course.

For students considering graduate school recommended languages are German, and, if possible, either French, Italian, or another language relevant to their areas of interest.

Student Learning Outcomes

Program Learning Outcomes

- We expect our art history majors to become conversant with some of the major conventions artists and architects have subscribed to over the millenia, and with how these have been bent or broken and why.
- We expect them to learn to write cogently and clearly, and to be able to analyze orally on the spot what they see in a work of art or architecture, often by comparison and contrast with works they know well.

Arts Major: Studio Art Option (B.A.)

https://www.unh.edu/program/bachelor-arts/arts-studio-art

Description

The B.A. in art - studio art option provides a strong fine arts education and solid foundation that prepares students for a life in the arts, whether it be as a professional or commercial artist, a teacher, an architect, a designer or a museum director. We offer courses in painting, drawing, photography (both digital and wet lab techniques), printmaking, sculpture (all media: steel, aluminum, bronze casting, clay, and wood), furniture design and fabrication, ceramics and design. A degree in studio art provides a foundation for diverse professional achievement.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Students must complete a minimum of 14 courses (56 credits) for the major requirements.
- Major courses must be completed with a minimum grade of C in each course. The required minimum overall GPA in major coursework is 2.0.
- Studio art majors may use two major-required courses to satisfy two Discovery category requirements.

Code	Title	Credits
Required Courses		
Core Foundation		
ARTS 510	Principles of Design	4
ARTS 532	Introductory Drawing	4
ARTS 567	Introductory Sculpture	4
Core Supplemental		
Select one 500/600-level 2D course from the following:		4
ARTS 536	Introduction Printmaking: Intaglio	
ARTS 546	Painting Design I: Perceptual Painting and Color Theory	
ARTS 640	Drawing Workshop	
Select one 500-level 3D course from the following:		4
ARTS 501	Introductory Ceramics	
ARTS 525	Introductory Woodworking	
Select one 500-level Photography course from the following:		4
ARTS 551	Introduction to Darkroom Photography	
ARTS 552	Introductory Digital Photography	
Concentration Courses		
Select four (4) Studio courses in a concentration at 500-600-700 level (see concentration courses below)		16
Advanced Studio Seminar		
ARTS 780	Advanced Studio Seminar	4
Core Art History		
Select one course from the following:		4
ARTH 474	Introduction to Architectural History	
or ARTH 480	Introduction to Art History	
or ARTH 485	Introduction to Global Art History	
Select two 600-level or above art history courses from the following:		8
ARTH 674	Greek Art and Architecture	
ARTH 678	Romanesque and Gothic Art	
ARTH 681	Early Renaissance Art	
ARTH 682	The High Renaissance	
ARTH 686	Sex and Sensuality in 18th-Century Art	
ARTH 688	Histories of Late 19th & 20th Century European Modernism	
ARTH 694	Vision and Modernity: From Panorama to Early Film	
ARTH 695	Topics in Art History	
ARTH 795	Understanding Art History: An In-Depth Overview	
Total Credits		**56**

Concentration Courses

- Students select four concentration courses total.
- Minimum of three 600-700 level studio courses.
- No more than one of the following: a 500-level studio course (select from ARTS 501 , ARTS 525, ARTS 536, ARTS 546, ARTS 551, ARTS 552, ARTS 596), ARTS 598 An Artist's Life, a 600-700 level art

history (see selection of courses in art history requirement above), or ARTS 600 Internship in Studio Art (with approval).

- January Term and Summer online courses cannot be used.

Code	Title	Credits
ARTS 601	Ceramics Workshop (may be repeated)	
ARTS 610	Principles of Typography	
ARTS 611	Animation and Motion Design	
ARTS 612	Interaction & Game Design	
ARTS 613	Design and Place	
ARTS 614	Design and People	
ARTS 625	Wood/Furniture Design Workshop (may be repeated)	
ARTS 636	Printmaking Workshop (may be repeated)	
ARTS 640	Drawing Workshop	
ARTS 651	Photography Workshop (may be repeated)	
ARTS 660	Painting Workshop	
ARTS 667	Sculpture Workshop (may be repeated)	
ARTS 796	Independent Study: Studio Art (K: Wood Design, may be repeated)	

While these courses represent the minimum departmental requirements for the studio art option, students may wish to plan a program involving greater depth in one or several of the studio areas.

Capstone
The Discovery Program capstone requirement will be fulfilled by completing a capstone project that reflects the training received, and personal artistic growth made, throughout the student's years of study at UNH. The capstone project includes participation in the BA/BFA Senior Exhibition in the UNH Museum of Art in April-May. Students will submit a minimum of 5 (or the equivalent what would be the equivalent of 5) recent works for faculty to review and select for the exhibition. At the review a written artist statement and verbal explanation of the work must also be presented.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Student Learning Outcomes

Program Learning Outcomes

Introductory (500) Level:
- Basic skillset in a particular arts discipline
- Working knowledge of the tools and materials used in a particular arts discipline
- Basic understanding of analytical thinking when making and talking about art
- Demonstrate development of artistry

Intermediate (500/600) Level:
- Demonstrate development of artistry and skill set in a range of artistic disciplines
- Demonstrate knowledge of tools and materials beyond the basics
- Deeper ability to discuss and analyze works of art
- Ability to verbalize intent in a particular work of art
- Ability to research particular artists
- Ability to declare an area of concentration for advanced in a particular arts discipline

Advanced (600/700) Level:
- Demonstrate a high level of artistry
- Ability to work independently
- Develop and Demonstrate an individual sensibility
- Ability to understand and verbalize intent in a work of art
- Ability to construct a professional capstone portfolio or thesis
- Demonstrate in-depth familiarity with a range of artistic movements both historical and contemporary

Arts Major: Studio Art/Art Education Option (B.A.)

https://www.unh.edu/program/bachelor-arts/arts-studio-artart-education

Description

The program in art education is organized into a five-year, teacher-education sequence. This curriculum is designed to prepare teachers of art in the public schools. The satisfactory completion of the B.A. studio art curriculum for art education students and required education courses, in conjunction with the fifth-year internship, will satisfy the initial licensure requirements for teachers of art in the public schools of New Hampshire and in most other states. These requirements may change by the time students apply for certification and the students are required to fulfill the then-current requirements. Art education students may take accredited crafts courses at other institutions as art electives.

A portfolio is required for acceptance to the studio art/art education option.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Students must complete a minimum of 14 courses (56 credits) for the major requirements.
- Major courses must be completed with a minimum grade of C in each course. The required minimum overall GPA in major coursework is 2.0.
- Studio art/art education majors may use two major-required courses to satisfy two Discovery category requirements.

Code	Title	Credits
Required Courses		
Core Foundation		
ARTS 501	Introductory Ceramics	4
ARTS 510	Principles of Design	4
ARTS 532	Introductory Drawing	4

ARTS 567	Introductory Sculpture	4
Core Supplemental		
Select one 500/600-level 2D course from the following:		4
ARTS 536	Introduction Printmaking: Intaglio	
ARTS 546	Painting Design I: Perceptual Painting and Color Theory	
ARTS 640	Drawing Workshop	
Select one 500-level Photography course from the following:		4
ARTS 551	Introduction to Darkroom Photography	
ARTS 552	Introductory Digital Photography (recommended)	
Concentration Courses		
Select four (4) Studio courses in a concentration at 500-600-700 level (see concentration courses below)		16
Advanced Studio Seminar		
ARTS 780	Advanced Studio Seminar	4
Art History Courses		
Select one course from the following:		4
ARTH 474	Introduction to Architectural History	
ARTH 480	Introduction to Art History	
ARTH 485	Introduction to Global Art History	
Select one 600-level elective from the following:		4
ARTH 674	Greek Art and Architecture	
ARTH 678	Romanesque and Gothic Art	
ARTH 681	Early Renaissance Art	
ARTH 682	The High Renaissance	
ARTH 686	Sex and Sensuality in 18th-Century Art	
ARTH 688	Histories of Late 19th & 20th Century European Modernism	
ARTH 694	Vision and Modernity: From Panorama to Early Film	
ARTH 695	Topics in Art History	
ARTH 795	Understanding Art History: An In-Depth Overview	
Select one 600-level elective with depth of content in 20th-21st Century art from the following:		4
ARTH 688	Histories of Late 19th & 20th Century European Modernism	
ARTH 694	Vision and Modernity: From Panorama to Early Film	
In addition to the above, other courses are required for teaching certification.		
Total Credits		**56**

Concentration Courses

- Students select four concentration courses total (16 credits).
- Minimum of three 600-700 level studio courses.
- No more than one of the following: a 500-level studio course (select from ARTS 501 , ARTS 525, ARTS 536, ARTS 546, ARTS 551, ARTS 552, ARTS 596), ARTS 598, a 600-700 level art history (see selection of courses in art history requirement above), or ARTS 600 Internship in Studio Art (with approval).
- January Term and Summer online courses cannot be used.

Code	Title	Credits
ARTS 601	Ceramics Workshop (may be repeated)	
ARTS 610	Principles of Typography	
ARTS 611	Animation and Motion Design	
ARTS 612	Interaction & Game Design	
ARTS 613	Design and Place	
ARTS 614	Design and People	
ARTS 625	Wood/Furniture Design Workshop (may be repeated)	
ARTS 636	Printmaking Workshop (may be repeated)	
ARTS 640	Drawing Workshop	
ARTS 660	Painting Workshop	
ARTS 651	Photography Workshop (may be repeated)	
ARTS 667	Sculpture Workshop (may be repeated)	
ARTS 780	Advanced Studio Seminar	
ARTS 796	Independent Study: Studio Art (K: Wood Design, may be repeated)	

Capstone

The Discovery Program capstone requirement will be fulfilled by completing a capstone project that reflects the training received, and personal artistic growth made, throughout the student's years of study at UNH. The capstone project includes participation in the BA/BFA Senior Exhibition in the UNH Museum of Art in April-May. Students will submit a minimum of 5 (or the equivalent what would be the equivalent of 5) recent works for faculty to review and select for the exhibition. At the review a written artist statement and verbal explanation of the work must also be presented.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Student Learning Outcomes

Program Learning Outcomes

Introductory (500) Level:

- Basic skillset in a particular arts discipline
- Working knowledge of the tools and materials used in a particular arts discipline
- Basic understanding of analytical thinking when making and talking about art
- Demonstrate development of artistry

Intermediate (500/600) Level:

- Demonstrate development of artistry and skill set in a range of artistic disciplines
- Demonstrate knowledge of tools and materials beyond the basics
- Deeper ability to discuss and analyze works of art
- Ability to verbalize intent in a particular work of art
- Ability to research particular artists
- Ability to declare an area of concentration for advanced in a particular arts discipline

Advanced (600/700) Level:

- Demonstrate a high level of artistry
- Ability to work independently
- Develop and Demonstrate an individual sensibility
- Ability to understand and verbalize intent in a work of art
- Ability to construct a professional capstone portfolio or thesis
- Demonstrate in-depth familiarity with a range of artistic movements both historical and contemporary

Fine Arts Major (B.F.A.)

https://www.unh.edu/program/bachelor-fine-arts/fine-arts

Description

Incoming first-year and transfer applicants wishing to enter the bachelor of fine arts (B.F.A.) degree program must first apply for, and be admitted to, the bachelor of arts (B.A.) in the Arts: Studio Art option. Students may submit a B.F.A. portfolio **after** they begin their studies at UNH, as early as the spring semester of their first year. A full faculty review is held each spring semester.

The B.F.A. curriculum provides advanced training for students who plan to enter professional graduate school or pursue careers as professional artists.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Students must complete a minimum of 17 courses and (72 credits) for the major requirements.
- Major courses must completed with a minimum grade of C in each course. The required minimum overall GPA in major coursework is 2.0.
- Fine arts majors may use two major-required courses to satisfy two Discovery category requirements.
- Transfer of 3-credit courses from other institutions will require additional course(s) to fulfill the major requirement of 72 credits. Transfer courses can fulfill only 8 requirements.

Code	Title	Credits
Required Courses		
Core Foundation		
ARTS 510	Principles of Design	4
ARTS 532	Introductory Drawing	4
ARTS 567	Introductory Sculpture	4
Core Supplemental		
Select one 500/600 level 2D course from the following:		4
ARTS 536	Introduction Printmaking: Intaglio	
ARTS 546	Painting Design I: Perceptual Painting and Color Theory	
ARTS 640	Drawing Workshop	
Select one 500-level 3D course from the following:		4
ARTS 501	Introductory Ceramics	
ARTS 525	Introductory Woodworking	
Select one Photography course from the following:		4
ARTS 551	Introduction to Darkroom Photography	
ARTS 552	Introductory Digital Photography	
Core Seminars		
ARTS 598	An Artist's Life	4
ARTS 798	Seminar/Senior Thesis (two-semester course)	8
Concentration Courses		
Select five (5) Studio courses in a concentration (see concentration courses below)		20
Advanced Studio Seminar		
ARTS 780	Advanced Studio Seminar	4
Core Art History		
Select one course from the following:		4
ARTH 474	Introduction to Architectural History	
ARTH 480	Introduction to Art History	
ARTH 485	Introduction to Global Art History	
Select two 600-level or above art history courses from the following:		8
ARTH 674	Greek Art and Architecture	
ARTH 678	Romanesque and Gothic Art	
ARTH 681	Early Renaissance Art	
ARTH 682	The High Renaissance	
ARTH 686	Sex and Sensuality in 18th-Century Art	
ARTH 688	Histories of Late 19th & 20th Century European Modernism	
ARTH 694	Vision and Modernity: From Panorama to Early Film	
ARTH 695	Topics in Art History	
ARTH 795	Understanding Art History: An In-Depth Overview	
Total Credits		**72**

Concentration Courses

- Students select five concentration courses total.
- Minimum of four 600-700 level studio courses.
- No more than one of the following: ARTS 600 Internship in Studio Art (with approval), a 600-700 level art history (see selection of courses in art history requirement above), or a 500-level studio course (select from ARTS 501, ARTS 525, ARTS 536, ARTS 546, ARTS 551, ARTS 552, ARTS 596).
- January Term and Summer online courses cannot be used.

Code	Title	Credits
ARTS 601	Ceramics Workshop (may be repeated)	
ARTS 610	Principles of Typography	
ARTS 611	Animation and Motion Design	
ARTS 612	Interaction & Game Design	
ARTS 613	Design and Place	
ARTS 614	Design and People	
ARTS 625	Wood/Furniture Design Workshop (may be repeated)	
ARTS 636	Printmaking Workshop (may be repeated)	
ARTS 651	Photography Workshop (may be repeated)	
ARTS 667	Sculpture Workshop (may be repeated)	
ARTS 796	Independent Study: Studio Art (K: Wood Design, may be repeated)	

The possible areas of concentration within the department are painting, sculpture, ceramics, design, drawing, printmaking, photography, and furniture design. Proposals for individualized programs are accepted only by permission of the departmental chairperson, the major adviser, and the departmental bachelor of fine arts committee. Candidates applying for the bachelor of fine arts program are required to submit a portfolio to the B.F.A. committee, which meets each spring semester.

The Discovery Program capstone requirement may be fulfilled by completing .

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program.

Student Learning Outcomes

Program Learning Outcomes

Introductory (500) Level:

- Basic skillset in a particular arts discipline
- Working knowledge of the tools and materials used in a particular arts discipline
- Basic understanding of analytical thinking when making and talking about art
- Demonstrate development of artistry

Intermediate (500/600) Level:

- Demonstrate development of artistry and skill set in a range of artistic disciplines
- Demonstrate knowledge of tools and materials beyond the basics
- Deeper ability to discuss and analyze works of art
- Ability to verbalize intent in a particular work of art
- Ability to research particular artists

- Ability to declare an area of concentration for advanced in a particular arts discipline

Advanced (600/700) Level:

- Demonstrate a high level of artistry
- Ability to work independently
- Develop and Demonstrate an individual sensibility
- Ability to understand and verbalize intent in a work of art
- Ability to construct a professional capstone portfolio or thesis
- Demonstrate in-depth familiarity with a range of artistic movements both historical and contemporary

Architectural Studies Minor

https://www.unh.edu/program/minor/architectural-studies

Description

The minor in architectural studies provides students with an interdisciplinary introduction to the history, theory and methods of architecture and its symbolism. The program allows students who are interested in this field to receive programmatic recognition of their work. It is designed to assist those who are contemplating enrollment at a school of architecture; are particularly interested in architectural history; want to supplement their technical majors (e.g., civil engineering) with strong academic minors; or plan to pursue careers in preservation, education, community service and public relations.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (18-20 credits total).

Code	Title	Credits
Required Courses		
ARTS 522	Topics in Architecture Design Studio	4
ARTS 532	Introductory Drawing	4
ARTH 474	Introduction to Architectural History	4
or ARTH 501	Introduction to Mediterranean Archaeology	
or CLAS 501	Introduction to Mediterranean Archaeology	
Electives		
Select two courses from the following (in consultation with minor coordinators):		6-8
ARTS 510	Principles of Design	
ARTS 520	Principles of Architectural Design	
ARTS 525	Introductory Woodworking	
or ARTS 567	Introductory Sculpture	
ARTS 600	Internship in Studio Art (only topic C - Architecture)	
ARTS 625	Wood/Furniture Design Workshop	
ARTS 667	Sculpture Workshop (only topic: Kinetic)	
ARTS 796	Independent Study: Studio Art (only topic G: Architectural Design)	
ARTH 400	Topics in Art History (only with architectural papers)	
ARTH 674	Greek Art and Architecture	
ARTH 678	Romanesque and Gothic Art	
ARTH 695	Topics in Art History	
CEE 402	2D Computer Aided Design	
CEE 795	Independent Study	
CEE 700	Building Information Modeling	
CEE 719	Green Building Design	
CLAS 510	Building Rome	
Total Credits		**18-20**

Art History Minor

https://www.unh.edu/program/minor/art-history

Description

The art history minor offers those majoring in other fields (including studio art) the chance to gain a serious knowledge of aspects of the history and meanings of Western art from antiquity to the modern world. Particularly for those working in history and the humanities, a minor in art history will provide new interdisciplinary perspectives on their major fields.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits).

Required Courses

Code	Title	Credits
One 400-level art history (ARTH 480 Introduction to Art History or ARTH 474 Introduction to Architectural History recommended but not required)		4
Select two additional art history courses at the 500-level or above		8
Select two additional art history courses at the 600-level or above		8
Total Credits		**20**

Art Minor

https://www.unh.edu/program/minor/art

Description

The art minor is an appropriate option for students who do not want to take the specific requirements for the art history or studio art minors, but who are still interested in taking art history and/or studio classes.

Requirements

Academic policies related to Minors.

The minor in art consists of completing five courses (20 credits) chosen from the offerings of the department. Courses can be all studio art, all art history, or a combination of both.

Required Courses

Code	Title	Credits
Select two ARTS/ARTH courses at the 500-level or above		8
Select three elective ARTS/ARTH courses		12
Total Credits		**20**

Design Studies Minor

https://www.unh.edu/program/minor/design-studies

Description

Situated within the studio arts program, the interdisciplinary minor in design studies brings together the formal and conceptual principles

of design in the visual expressions of the fine arts (painting, sculpture, photography, etc.), the commercial arts (graphic design, illustration, etc.), the industrial arts (engineering) and the performing arts (stage, costume and lighting design).

Course options in communication, marketing, English and art history offer the opportunity to contextualize the principles and products of design in a broader historical, sociological and cultural context.

Course requirements and options within the design studies minor enable students to develop a common skill set of literacy and fluency in a range of design software programs (Photoshop, InDesign, Light Box, Fuse, etc.), the utility of which has become increasingly more essential to a range of fields of study and vocations.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits).[1]

Students must receive a minimum grade of C in all required courses.

Required Courses

Code	Title	Credits
Applied/Studio Practice		
ARTS 510	Principles of Design	4
Select two of the following:		8
ARTS 501	Introductory Ceramics	
ARTS 525	Introductory Woodworking	
ARTS 532	Introductory Drawing	
ARTS 536	Introduction Printmaking: Intaglio	
ARTS 546	Painting Design I: Perceptual Painting and Color Theory	
ARTS 551	Introduction to Darkroom Photography	
ARTS 567	Introductory Sculpture	
ARTS 610	Principles of Typography	
ARTS 613	Design and Place	
ARTS 614	Design and People	
THDA 460	Elements of Design	
THDA 546	Costume Design for the Theatre	
THDA 548	Stage Lighting Design and Execution	
Technical Practice		
Select one of the following:		4
ARTS 552	Introductory Digital Photography	
ARTS 611	Animation and Motion Design	
ARTS 612	Interaction & Game Design	
CEE 402	2D Computer Aided Design [1]	
CEE 700	Building Information Modeling [1]	
CMN 596	Special Topics in Media Studies (Multi-media Communication)	
ENGL 712	Multimedia Storytelling	
IT 403	Introduction to Internet Technologies	
IT 502	Intermediate Web Design	
Historical/Theoretical Context		
Select one of the following:		4
ARTH 480	Introduction to Art History	
ARTH 474	Introduction to Architectural History	
CMN 697	Seminar in Rhetorical Study (Rhetoric of the Photograph)	
CMN 756	Rhetorics of Display	
CMN 772	Seminar in Media Theory	
ENGL 533	Introduction to Film Studies	
ENGL 616A	Studies in Film/Genre	
ENGL 616B	Studies in Film/Authorship	
ENGL 616C	Studies in Film/Culture and Ideology	
ENGL 616D	Studies in Film/Narrative and Style	
MKTG 520	Topics in Marketing (Understanding Your Customer or Digital Marketing Communications)	
Total Credits		**20**

[1] 19 credits are required to complete the minor if CEE 402 or CEE 700 is selected.

Studio Arts Minor

https://www.unh.edu/program/minor/studio-arts

Description

The studio arts minor is for students who are interested in continuing on to the intermediate and advanced levels in a variety of mediums.

Requirements

Academic policies related to Minors.

- The minor in studio arts consists of completing five courses (20 credits).

Required Courses

Code	Title	Credits
ARTS 532	Introductory Drawing	4
Select two studio courses from the 600 level or above		8
Select two additional studio courses chosen from the offerings of the department		8
Total Credits		**20**

Asian Studies

Programs

- Asian Studies Minor (p. 231)

Asian Studies Minor

https://www.unh.edu/program/minor/asian-studies

Description

The aim of the interdisciplinary Asian studies minor program is to foster teaching and learning as well as research in all areas of Asia. The minor offers opportunities to develop proficiency in Asian languages and to study the histories, politics, literatures, cultures and religions of East Asia (China, Japan, Korea and others) and South Asia (India, Pakistan, Sri Lanka, Bhutan and others). Courses offered provide students the chance to explore a wide range of contemporary subjects such as foreign policy, language use, education, environment, the Asian-American experience, ethnic and religious conflict, literary and cultural production, and cross-border movements of industry and ideas.

Requirements

Academic policies related to Minors.

Students must complete five courses (20 credits) for the minor.

No more than three courses can be counted from any one of the following disciplines/subject prefixes: Anthropology (ANTH), Asian American or South Asian Literature (ENGL), Geography (GEOG), History (HIST), Languages, Literatures, and Cultures (CHIN or JPN), Philosophy (PHIL), or Political Science (POLT)

Code	Title	Credits
Approved Courses		
ANTH 500	Peoples and Cultures of the World (Topic D: Asia)	4
ANTH 501	World Archaeological Cultures (Topic F: Asia)	4
CHIN 401	Elementary Chinese I	4
CHIN 402	Elementary Chinese II	4
CHIN 425	Introduction to Chinese Culture	4
CHIN 503	Intermediate Chinese I	4
CHIN 504	Intermediate Chinese II	4
CHIN 632	Advanced Chinese Conversation and Composition II	4
CHIN 795	Independent Study	1-4
ENGL 581	Reading the Postcolonial Experience	4
GEOG 530	China: People, Politics and Economy	4
PHIL 520	Introduction to Eastern Philosophy	4
POLT 546	Wealth and Politics in Asia	4
POLT 556	Politics in China	4
POLT 569	The Rise of China	4
POLT 742	Beyond Bollywood: Politics of India & South Asia	4
POLT 797E	Seminar in International Politics (US/China Decision Making)	4

Additional courses may count toward the minor with permission.

Chinese (CHIN)

Programs

- Chinese Minor (p. 232)

Chinese Minor

https://www.unh.edu/program/minor/chinese

Description

The Chinese minor provides students with linguistic skills and cross-cultural competence that will complement their studies in many other disciplines, such as business, international affairs, education, hotel management and social service. It prepares students for future academic and professional opportunities in which proficiency in Chinese is required or preferred. Students who have studied Chinese at UNH have gone on to use Chinese for a variety of career paths in both domestic and international settings.

Requirements

Academic policies related to Minors.

The Chinese minor consists of completing five courses (20 credits).

Code	Title	Credits
Required Courses		
CHIN 503	Intermediate Chinese I	4
CHIN 504	Intermediate Chinese II	4
CHIN 631	Advanced Chinese Conversation and Composition I	4
CHIN 632	Advanced Chinese Conversation and Composition II	4
CHIN 425	Introduction to Chinese Culture [1]	4
Total Credits		**20**

[1] Or another Chinese culture or literature course approved by the faculty.

Cinema Studies

Programs

- Cinema Studies Minor (p. 232)

Cinema Studies Minor

https://www.unh.edu/program/minor/cinema-studies

Description

The minor in cinema studies offers a variety of opportunities to study a predominant contemporary form of narrative, aesthetic and social discourse: the moving image. Film is the primary medium of study for the minor, but the cinematic practices of video and television also may be included as potential areas of interest. Courses consist of interdisciplinary approaches to the analysis of cinema, covering works from the early cinema to the present, from the U.S. and other nations. Students learn the aesthetics, history, technology, economics and theory of cinema, while also acquiring the language for analyzing its forms and practices. The minor allows for organized and meaningful study of the moving image from a wide range of scholarly interests and approaches that complement the increasingly significant place of cinema in many major disciplines and other programs. Students enrolled in the cinema studies minor will become articulate and critical spectators in the larger cultural contexts of film and media studies.

Requirements

Academic policies related to Minors.

The Cinema Studies Minor consists of completing five courses (20 credits).

Required Courses

Code	Title	Credits
Introductory Course		
ENGL 533	Introduction to Film Studies	4
History and Theory of Film		
LLC 540	Film History	4
or ENGL 618	Film Theory	
Advanced and/or Focused Courses		
Select two of the following:		8
ENGL 616A	Studies in Film/Genre	
ENGL 616B	Studies in Film/Authorship	
ENGL 616C	Studies in Film/Culture and Ideology	
ENGL 616D	Studies in Film/Narrative and Style	
ITAL 525	Italian Cinema	
Elective Courses		
Select one elective course [1]		4
Total Credits		**20**

[1] Electives are drawn from an approved list of courses for the minor, which is compiled and announced every semester. Students also may choose from the advanced and/or focused courses. Elective courses have a significant cinema studies component and may have another

disciplinary focus as well. Contributing departments and/or programs include: American studies, anthropology, arts, communication, English, French, geography, German, history, humanities, Italian, music, philosophy, political science, psychology, Russian, sociology, Spanish, theatre and dance, and women's and gender studies. Students should check with the cinema minor coordinator each semester for approval of the elective.

Classics (CLAS)

Classics encompasses the interdisciplinary study of the Greeks and Romans, as well as the ways in which the ancient world's influence extends to the Medieval Period, the Renaissance and the modern world. Studying classics, therefore, is to investigate several thousand years of material through the study of languages, literature, history, politics, law, archaeology, art, mythology and folklore, gender and sexuality, religious studies, philosophy and more—all with methods derived from a variety of humanistic and social science perspectives. This breadth provides an excellent liberal arts education that prepares students for a variety of careers, as well as for further study. Classics majors from UNH have gone on to law school, medical school, and graduate school in classics and many related disciplines and have taken up careers in teaching, government service, the military and business.

Classics majors have many opportunities at UNH to pursue their own interests in the ancient world while completing their requirements. In addition to Greek and Latin, program faculty may occasionally offer, on request, courses on other ancient languages, including Hittite, Hebrew, Egyptian Hieroglyphs, Syriac and Sanskrit. Students are encouraged to take courses offered outside the department that relate to the field of classics, such as those in ancient history, archaeology, ancient philosophy, classical art, modern languages, linguistics and English literature. Some of these courses can even count for major requirements; a current list of approved courses is available from any departmental adviser. Study abroad is another way that many majors broaden their studies. Students have frequently spent semesters at many study abroad sites, including the Intercollegiate Center for the Classical Studies in Rome. (UNH is part of the consortium of Universities that supports this program.) The Department of Classics, Humanities and Italian Studies regularly runs its own popular January Term course in Rome and manages several other study abroad programs.

The program offers three different options for the classics major. In brief, the differences are:

- The Classical Languages and Literatures (CLL) option allows for the most in-depth study of the ancient languages and requires knowledge of both Ancient Greek and Latin. It thus provides the strongest preparation for students considering graduate study in classics or related areas, and can also be an appropriate choice (with careful planning) for those thinking about teaching Latin in secondary schools. At the same time, it is designed for any student who desires a solid liberal arts education.
- The Ancient Mediterranean Civilizations (AMC) option balances language study with the opportunity for students to select from a wide range of courses covering many aspects of the Greek and Roman worlds, as well as the neighboring peoples in Europe, North Africa and the Near East. The flexibility of this option makes it especially attractive for students who wish to double major in another subject. It is generally not suitable, however, for those who wish to pursue related graduate study or a career in teaching Latin. AMC majors can, however, supplement the requirements with additional coursework to keep these options open.
- The Latin and Latin Teaching (LLT) option is designed to provide a good foundational liberal arts education centered on Latin and the Roman world, but it also includes specific elements that make it particularly appropriate for students who are considering careers teaching Latin in secondary schools after graduation. Students should contact their primary advisor in the Classics program to discuss different pathways to licensure, which may include post-graduate work at an institution that offers an MAT (or MEd), or seeking a site-based license with the appropriate state's department of education.

https://cola.unh.edu/classics-humanities-italian-studies

Programs

- Classics Major: Ancient Mediterranean Civilizations Option (B.A.) (p. 233)
- Classics Major: Classical Languages & Literatures Option (B.A.) (p. 235)
- Classics Major: Latin & Latin Teaching Option (B.A.) (p. 236)
- Classics Minor (p. 237)
- Greek Minor (p. 237)
- Latin Minor (p. 238)

Faculty

Classics, Humanities, and Italian Studies Department Faculty

Classics Major: Ancient Mediterranean Civilizations Option (B.A.)

https://www.unh.edu/program/bachelor-arts/classics-ancient-mediterranean-civilizations

Description

The Ancient Mediterranean Civilizations (AMC) option balances language study with the opportunity for students to select from a wide range of courses covering many aspects of the Greek and Roman worlds, as well as the neighboring peoples in Europe, North Africa and the Near East. The flexibility of this option makes it especially attractive for students who wish to double major in another subject. It is generally not suitable, however, for those who wish to pursue related graduate study or a career in teaching Latin. AMC majors can, however, supplement the requirements with additional coursework to keep these options open.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Classics majors may use two major-required courses to satisfy two Discovery category requirements.

The required minimum overall GPA in major coursework is 2.0.

To complete the AMC option of the classics major, a student must complete 10 courses (40 credits), distributed as follows:

Code	Title	Credits
Language Proficiency		
Demonstrate proficiency by taking at least 8 credits in GREK or LATN at the 503 level or above		8
Other Courses		
Select at least 32 additional credits in CLAS, GREK, or LATN courses, including: [1]		32
CLAS 403	Introduction to Greek Civilization	
or CLAS 404	Introduction to Roman Civilization	
At least 8 credits from courses at the 600 level or above		
Capstone Experience		
Select an approved capstone experience of the following:		
CLAS 701W	Capstone Course	
Senior thesis		
Honors thesis		
At least 4 credits in 700-level LATN or GREK courses		
Approved internship		
Approved semester study abroad focused on the classical world		
Total Credits		**40**

[1] No more than 8 credits may come from CLAS courses at the 400 level, with up to an additional 8 credits from LATN and GREK courses at the 400 level. There are also courses taught outside of the program that are approved substitutes for CLAS courses, and the department will accept up to 8 credits from such courses. An up-to-date list of these courses is available from departmental advisers and additional exceptions are allowed with the written approval of the adviser.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
LATN 401 or GREK 401	Elementary Latin I or Elementary Classical Greek I	4
CLAS 401	Classical Mythology	4
ENGL 401	First-Year Writing	4
Elective		4
	Credits	**16**
Spring		
LATN 402 or GREK 402	Elementary Latin II or Elementary Classical Greek II	4
CLAS 404	Introduction to Roman Civilization	4
Discovery Course		4
Elective or Discovery Course		4
	Credits	**16**
Second Year		
Fall		
LATN 503 or GREK 503	Intermediate Latin I or Intermediate Classical Greek I	4
CLAS 520A	Classical Society, Politics and Ethics: Democracies and Republics	4
Discovery Course		4
Elective Course		4
	Credits	**16**
Spring		
LATN 504 or GREK 504	Intermediate Latin II or Intermediate Classical Greek II	4
CLAS Course		4
Discovery Course		4
Elective Course		4
	Credits	**16**
Third Year		
Fall		
LATN 605 or GREK 753	Readings in Latin Literature (or Elective Course) or Advanced Study in Athenian Literature	4
CLAS 601	Classical Myth II: The Power and Persistence of Myth	4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
CLAS 677 or HIST 677	History of Ancient Rome or History of Ancient Rome	4
CLAS 701W	Capstone Course	4
Discovery Course		4
Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
Major Elective Course		4
Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
Major Elective Course		4
Elective Course		4

Elective Course	4
Elective Course	4
Credits	**16**
Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Analyze and critique the cultural and historical importance of the ancient Greeks and Romans.
- Recognize and assess the relative value, and to integrate, the distinct categories of evidence from antiquity: material and textual.
- Demonstrate an understanding of the steps of the intellectual process as developed in classical antiquity, including: identifying and defining essential questions; research in the best and fullest range of evidence; reasoned critique of the evidence; insightful synthesis of all relevant evidence; critical evaluation and integration of previous interpretations; creating an argument, including in essays or papers, which takes into account all the evidence
- Translate key Latin and/or Greek texts at the intermediate level and demonstrate a knowledge of Latin or Greek vocabulary, morphology, and syntax at an intermediate level.
- Show a familiarity with the essential literary sources from classical antiquity, and how they have been received in later periods.

Classics Major: Classical Languages & Literatures Option (B.A.)

https://www.unh.edu/program/bachelor-arts/classics-classical-languages-literatures

Description

The Classical Languages and Literatures (CLL) option allows for the most in-depth study of the ancient languages and requires knowledge of both Ancient Greek and Latin. It thus provides the strongest preparation for students considering graduate study in classics or related areas, and can also be an appropriate choice (with careful planning) for those thinking about teaching Latin in secondary schools. At the same time, it is designed for any student who desires a solid liberal arts education.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Classics majors may use two major-required courses to satisfy two Discovery category requirements.

The required minimum overall GPA in major coursework is 2.0.

To complete the CLL option of the classics major, a student must complete 10 courses (40 credits), distributed as follows:

Code	Title	Credits
Language Courses [1]		
Select at least 12 credits at the 503 level or above [2]		12-24
Including:		
Select at least one class at the 700 level in the primary language (GREK or LATN)		
Select at least one class at the 504 level or above in the secondary language (LATN or GREK)		
Non-Language Courses		
Select at least 16 credits in CLAS courses. As many as 28 credits may be counted toward this option. [3]		16-28
Capstone		
Select an approved capstone experience of the following:		
CLAS 701W	Capstone Course	
Senior thesis		
Honors thesis		
At least 8 credits in 700-level LATN or GREK courses		
Approved internship		
Approved semester study abroad focused on the classical world		
Total Credits		**40**

1. No credits from language courses at the 400 level may be counted toward this option.
2. Students may count as many as 24 toward the CLL major option.
3. No more than 4 credits may come from courses at the 400 level. There are also courses taught outside of the program that are approved substitutes for CLAS courses, and the department will accept up to 8 credits from such courses. An up-to-date list of these courses is available from departmental advisers and additional exceptions are allowed with the written approval of the adviser.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
LATN 401 or GREK 401	Elementary Latin I or Elementary Classical Greek I	4
CLAS 401	Classical Mythology	4
ENGL 401	First-Year Writing	4
Elective		4
	Credits	**16**
Spring		
LATN 402 or GREK 402	Elementary Latin II or Elementary Classical Greek II	4

CLAS 404	Introduction to Roman Civilization	4
Discovery Course		4
Elective or Discovery Course		4
	Credits	**16**
Second Year		
Fall		
LATN 503 or GREK 503	Intermediate Latin I or Intermediate Classical Greek I	4
LATN 401 or GREK 401	Elementary Latin I or Elementary Classical Greek I	4
CLAS 520A	Classical Society, Politics and Ethics: Democracies and Republics	4
Discovery Course		4
	Credits	**16**
Spring		
LATN 504 or GREK 504	Intermediate Latin II or Intermediate Classical Greek II	4
LATN 402 or GREK 402	Elementary Latin II or Elementary Classical Greek II	4
Discovery Course		4
Major Elective Course		4
	Credits	**16**
Third Year		
Fall		
LATN 605 or GREK 753	Readings in Latin Literature (or Elective Course) or Advanced Study in Athenian Literature	4
LATN 503 or GREK 503	Intermediate Latin I or Intermediate Classical Greek I	4
CLAS 601	Classical Myth II: The Power and Persistence of Myth	4
Discovery Course		4
	Credits	**16**
Spring		
LATN 753 or GREK 754	Advanced Studies in the Literature of the Golden Age or	4
LATN 504 or GREK 504	Intermediate Latin II or Intermediate Classical Greek II	4
CLAS 677 or HIST 677	History of Ancient Rome or History of Ancient Rome	4
Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
CLAS 701W	Capstone Course	4
Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
Major Elective Course		4
Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Translate, contextualize, and interpret key texts in their primary language (Greek or Latin) at the upper level.
- Translate, contextualize, and interpret intermediate-level texts in their secondary language (Greek or Latin).
- Demonstrate an accurate understanding of linguistic concepts related to Greek and Latin including the elements of phonetics, semantics, and morphology and syntax at an upper level for their primary language and at an intermediate level for their secondary language.
- Analyze and critique, including in essays or papers, the cultural, literary, and historical significance of the ancient Greeks and Romans, and how they have been received in later periods.

Classics Major: Latin & Latin Teaching Option (B.A.)

https://www.unh.edu/program/bachelor-arts/classics-latin-latin-teaching

Description

The Latin and Latin Teaching (LLT) option is designed to provide a good foundational liberal arts education centered on Latin and the Roman world, but it also includes specific elements that make it particularly appropriate for students who are considering careers teaching Latin in secondary schools after graduation. This option does not lead directly to state certification.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each

individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Classics majors may use two major-required courses to satisfy two Discovery category requirements.

The required minimum overall GPA in major coursework is 2.0.

To complete the LLT option of the classics major, a student must complete 10 courses (40 credits), distributed as follows:

Code	Title	Credits
Latin Language Courses		
Select at least 20 credits of LATN courses at the 504 level or above [1]		20
Other Courses		
Student must take at least three of the following courses in areas concerning mythology or Roman history:		12
CLAS 401	Classical Mythology	
CLAS 404	Introduction to Roman Civilization	
CLAS 601	Classical Myth II: The Power and Persistence of Myth	
CLAS 677	History of Ancient Rome	
CLAS 678	Topics in Ancient Roman History	
Electives		
Select 8 credits of electives (which may include credits earned in a capstone experience) [2]		8
Capstone		
Select an approved capstone experience from the following:		
CLAS 701W	Capstone Course	
Senior thesis		
Honors thesis		
At least 12 credits in 700-level LATN courses		
Approved external internship		
CLAS 694	Supervised Practicum	
Approved semester study abroad focused on the classical world		
Total Credits		**40**

1 At least 4 credits must come at the 700 level.

2 An up-to-date list of these courses is always available from department advisors, and advisors can also approve exceptions in writing. The following CLAS courses do not count: CLAS 403 Introduction to Greek Civilization and CLAS 694 Supervised Practicum. Besides CLAS 401 Classical Mythology and CLAS 404 Introduction to Roman Civilization, no other 400-level courses may count. No Greek language courses are required for the LLT option, but students are encouraged to complete at least the introductory sequence (401–402).

There are also courses taught outside of the program that are approved substitutes for CLAS courses, and the department will accept up to 8 credits from such courses. An up-to-date list of these courses is available from departmental advisors and additional exceptions are allowed with the written approval of the advisor.

Please note that the LLT option does not by itself meet New Hampshire state certification requirements. Students interested in a path to teaching and licensure should inform their primary academic advisor to be connected with the advising contact in Education to discuss teaching licensure paths including a site-based license through the appropriate state department of education.

Student Learning Outcomes

Program Learning Outcomes

- Ability to read major works of Latin authors in prose and poetry, and to translate Latin into idiomatic English.
- Ability to read aloud both prose and poetry in correct meter in Latin using an accepted standard of pronunciation.
- Knowledge of the morphology, phonology, and syntax of Latin; and of the historical development of Latin and the place of Latin in the etymology of English words.
- Ability to write short compositions in Latin.
- Knowledge, as demonstrated in essays or papers, of: a) major aspects of Greek and Roman history, cultural institutions and their connections to the western tradition and other world cultures b) the history and content of Green and Roman literature, in translation or in the original c) classical mythology.

Classics Minor

https://www.unh.edu/program/minor/classics

Description

Classics encompasses the interdisciplinary study of the Greeks and Romans, as well as the ways in which the ancient world's influence extends to the Medieval Period, the Renaissance and the modern world. Studying classics, therefore, is to investigate several thousand years of material through the study of languages, literature, history, politics, law, archaeology, art, mythology and folklore, gender and sexuality, religious studies, philosophy and more—all with methods derived from a variety of humanistic and social science perspectives. This breadth provides an excellent liberal arts education that prepares students for a variety of careers, as well as for further study.

The coordinator is Scott Smith, Murkland Hall 301; Department of Classics, Humanities and Italian Studies; e-mail scott.smith@unh.edu.

Requirements

Academic policies related to Minors.

The minor in classics consists of completing five courses (20 credits).

Required Courses

Code	Title	Credits
Select five elective courses in classics, Greek and/or Latin		20
Total Credits		**20**

Greek Minor

https://www.unh.edu/program/minor/greek

Description

Explore the cultural foundations of Western civilization in the Greek minor, studying ancient and modern Greek and Greek history, literature, philosophy and religion. The minor compliments studies in areas such as business, classics, history, the humanities, philosophy or international affairs, and will help you prepare for a career at home or abroad, or for graduate studies.

The coordinator is Scott Smith, Murkland Hall 301; Department of Classics, Humanities and Italian Studies; e-mail scott.smith@unh.edu.

Requirements

Academic policies related to Minors.

The minor in Greek consists of completing five courses (20 credits).

Required Courses

Code	Title	Credits
Select five elective courses in Greek		20
Total Credits		**20**

Latin Minor

https://www.unh.edu/program/minor/latin

Description

In the Latin minor, you'll study Latin and the civilization, culture and mythology of the Roman world. You'll be able to improve your fluency and your composition skills, and read in the original such classics as Lucretius, Catullus, Vergil, Horace and Ovid.

The coordinator is Scott Smith, Murkland Hall 301; Department of Classics, Humanities and Italian Studies; e-mail scott.smith@unh.edu.

Requirements

Academic policies related to Minors.

The minor in Latin consists of completing five courses (20 credits).

Required Courses

Code	Title	Credits
Select five elective courses in Latin		20
Total Credits		**20**

Cognates

- Art History, Design, and Computer Sciences Cognate (p. 238)
- Digital Writing and Literature Cognate (p. 238)
- Intercultural Communication for the Professional World Cognate (p. 239)
- Medical Sociology Cognate (p. 239)
- Philosophy of Business, Innovation, & Technology Cognate (p. 240)
- Political and Legal Philosophy Cognate (p. 240)
- Skills and Perspectives for the Digital World Cognate (p. 240)
- Studies in Fashion and Design Cognate (p. 241)
- Studies in the Design of Interior Space Cognate (p. 241)
- Technical Writing and Public Speaking Cognate (p. 242)
- Philosophy of Business, Innovation, & Technology Cognate (p. 240)

Art History, Design, and Computer Sciences Cognate

https://www.unh.edu/program/cognate/art-history-design-computer-sciences

Description

The cognate is for students to develop basic skills in art history and design as well as computer programming. The aim is for them to be able to apply programming skills to develop projects related to museum collections management and visitor experience, research projects, website design for cultural institutions, and art market intelligence and data transparency. Students will be encouraged to learn the basic concepts of art history and design and combine them in creative ways with emerging technologies such as Augmented Reality, Virtual Reality, 3D modelling and more traditional website design. The aim is to give students a head start on how emerging technologies can come together with the art market as well as cultural heritage to help document, preserve, investigate and present it for future generations.

Requirements

The cognate consists of completing three courses in total (12 credits) selected from the list below, preferably completed in the order listed.

Code	Title	Credits
Required Courses		
1. Arts		
Select one course from the following:		4
ARTH 440A	From Digging to Digital: Preserving and Displaying the Past	
ARTH 474	Introduction to Architectural History	
ARTH 480	Introduction to Art History	
ARTS 510	Principles of Design	
2. Computer Sciences		
Select one course from the following:		4
CS 408	Living in a Networked World: The Good, the Bad, and the Ugly	
CS 410P	Introduction to Scientific Programming/Python	
CS 415	Introduction to Computer Science I	
CS 457	Introduction to Data Science and Analytics	
IT 403	Introduction to Internet Technologies	
3. Digital Applications [1]		
Select one course from the following:		4
ARTH 674	Greek Art and Architecture	
ARTH 699	Museum Studies	
HIST 771	Museum Studies	
Any other 600-level Art History course, by permission (WI)		
Total Credits		**12**

[1] Students should aim to complete a project focused on digital applications.

Digital Writing and Literature Cognate

https://www.unh.edu/program/cognate/digital-writing-literature

Description

Many jobs nowadays require not only solid reading and writing skills; but also the ability to deploy and adapt these skills in a variety of electronic, professional, public and semi-public platforms. This cognate builds students' ability to comprehend and interpret difficult texts (including complex instructions); to edit, proofread and frame their work for different audiences and contexts; and to navigate rudimentary markup (code) and varied electronic interfaces with confidence and independence.

In consultation with a program advisor, students may choose to follow a specialized track. For example, selecting courses such as Creative Nonfiction and Multimedia Storytelling can form a "creative" track for those interested in digital storytelling and audio production. Similarly, Special Topics in Literature may provide pathways into cultural heritage management or nonprofit careers. Alternatively, students already focused on a specific field, such as journalism, may explore complementary digital tools—such as taking Digital Reporting to strengthen their digital reporting skills.

Contact the Department of English, 230F Hamilton Smith Hall or (603) 862-1313, with questions.

Requirements

- Credit toward the cognate will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the cognate.
- Courses taken on the pass/fail basis may not be used for the cognate.

Code	Title	Credits
Required		
ENGL 501	Introduction to Creative Nonfiction	4
or ENGL 502	Professional and Technical Writing	
Select two courses from the following:		8
ENGL 602	Advanced Professional and Technical Writing	
ENGL 620	English Major Internship (Digital Archiving and Editing)	
ENGL 623	Creative Nonfiction (see advisor for help in identifying appropriate section)	
ENGL 631	Digital Reporting	
ENGL 693	Special Topics in Literature (Topic N, Introduction to Digital Humanities)	
ENGL 712	Multimedia Storytelling	
ENGL 789	Special Topics in English Teaching (Teaching English in the 21st Century)	
Total Credits		**12**

Intercultural Communication for the Professional World Cognate

https://www.unh.edu/program/cognate/intercultural-communication-professional-world

Description

This cognate is designed to provide students with the means to develop a global perspective, intermediate communication skills, and an understanding of the dynamics of intercultural communication. Research has linked study abroad experience with students' future employability, and "intercultural/global competence" in particular is a skill valued by employers in a wide range of fields. This cognate provides students a means to attain these valuable, marketable skills, as well as a means to demonstrate this to potential employers.

Contact the Department of Languages, Literatures and Cultures with questions LLC.dept@unh.edu or call (603) 862-4005.

Requirements

Credit toward the cognate will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the cognate. Courses taken on the pass/fail basis may not be used for the cognate.

Code	Title	Credits
Required Course		
LLC 535A	Professional Culture in Europe [1]	4
Language Skills		
Choose any modern language course numbered 503 or above (503, 631, 632) consistent with the region covered in the professional culture course above and the study abroad experience below		4
Study Abroad Experience		
Choose any program in country for 5 weeks or longer that involves coursework in the target or host language/language other than English [2]		4
Total Credits		**12**

1 Taught in English, fulfills WC Discovery, no prior knowledge assumed.
2 Students can petition for an alternate experience, such as The Washington Center Program, as long as the internship placement involves foreign language use. Preferably, this will relate to the same region covered in the professional culture course and the language skills course, but that is not required.

Medical Sociology Cognate

https://www.unh.edu/program/cognate/medical-sociology

Description

The medical sociology cognate provides students with an understanding of how social structure shapes the etiology of health and illness as well as the availability, effectiveness and choices around health care on micro and macro levels. It develops students' sociological imagination, fosters their application of a sociological perspective to the study of health, and allows them to gain the skills needed to be informed consumers of empirical health research. The focus on empirical literacy that is central to courses in sociology facilitates students' ability to communicate and apply research findings in their respective professional fields.

Although the sociological perspective will benefit students from all backgrounds, a cognate in medical sociology may be especially relevant for students majoring in biomedical science, neuroscience and behavior, psychology, gerontology, health and physical education, nursing, health policy and administration, business, human development and others.

Requirements

• Any three courses in medical/health focused sociology courses (12 credits) with a grade of C- or better
• Submission of a completed "Certification of Completion of Cognate" form
• Courses taken pass/fail may NOT be used for the cognate.
• Sociology majors may count cognate classes as major electives.

Code	Title	Credits
Required Courses		
Select three courses from the following:		12
SOC 555	Death and Dying in America	
SOC 570	Sexual Behavior	
SOC 620	Drugs and Society	
SOC 625	Mental Health and Society	
SOC 635W	Medical Sociology	
SOC 647	Sociology of Work and Well-Being	
SOC 697	Special Topics (Topic: Work and Well-Being)	
SOC 740	Sociology of Mental Health	

SOC 788	
Total Credits	**12**

Philosophy of Business, Innovation, & Technology Cognate

https://www.unh.edu/program/cognate/philosophy-business-innovation-technology

Description

Our internationally renowned philosophy professors emphasize discussion, debate, and writing in our courses. Wrestling with big questions prepares our students exceptionally well for highly successful careers in business and cutting-edge technology. As a lively and nurturing faculty personally invested in the success of our high achieving students, we take pride in watching our graduates go on to excel in top law schools, elite graduate programs, and prestigious positions from Wall Street to Silicon Valley.

For students unable to major or minor in Philosophy, students may select the three-course cognate in Philosophy of Business, Innovation, and Technology. This cognate provides official recognition for those who choose to emphasize the study of the relationships between markets, technology, and human well-being. Students will choose courses in the philosophy of artificial intelligence, evolution, neuroscience, biotechnology, business ethics, economic policy, environmental ethics and other high impact subjects.

Contact the Philosophy Department with questions at (603) 862-2060 or philosophy@unh.edu.

Requirements

The cognate consists of completing three (3) philosophy courses (12 credits).

Credit toward the cognate will only be given for courses completed with a minimum grade of C- or better, and a 2.00 grade-point average must be maintained in courses for the cognate. Courses taken on the pass/fail basis may not be used for the cognate.

Required Courses

Code	Title	Credits
Select three philosophy courses from the following:		12
PHIL 421	Philosophy and the Arts	
PHIL 424	The Future of Humanity: Science, Technology, and Society	
PHIL 430	Ethics and Society	
PHIL 431	Business Ethics	
PHIL 435	Human Nature and Evolution	
PHIL 436	Social and Political Philosophy	
PHIL 447	A.I., Robots, and People	
PHIL 450	Environmental Ethics	
PHIL 530	Ethics	
PHIL 531	Topics in Professional and Business Ethics	
PHIL 630	Neuroscience and Philosophy	
PHIL 660	Law, Medicine, and Ethics	
an approved 700-level philosophy seminar		

Students do not need to declare a cognate; however, we recommend that students meet with a faculty member from the Philosophy Department to discuss their plan. At the beginning of a student's final semester of study, the student should complete a Certification of Completion of Cognate form, obtain the necessary signatures, and submit it to their Dean's Office.

Political and Legal Philosophy Cognate

https://www.unh.edu/program/cognate/political-legal-philosophy

Description

For students unable to major or minor in philosophy. This option provides official recognition for students who choose to emphasize the study of political and legal philosophy.

You do not need to declare a cognate; however, we recommend that you meet with a faculty member from the Philosophy Department to discuss your plan. At the beginning of your final semester of study, you should complete a certification of completion of cognate form, obtain the necessary signatures, and submit it to your Dean's Office.

Requirements

Credit toward the cognate will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the cognate. Courses taken on the pass/fail basis may not be used for the cognate.

Code	Title	Credits
Requirements		
Select three courses from the following:		12
PHIL 405	Critical Thinking	4
PHIL 419	Race, Gender and Social Justice	4
PHIL 420	Introduction to Philosophy of Law and Justice	4
PHIL 424	The Future of Humanity: Science, Technology, and Society	4
PHIL 430	Ethics and Society	4
PHIL 431	Business Ethics	4
PHIL 436	Social and Political Philosophy	4
PHIL 450	Environmental Ethics	4
PHIL 510	Philosophy and Feminism	4
PHIL 531	Topics in Professional and Business Ethics	4
PHIL 620	20th Century European Philosophy	4
PHIL 630	Neuroscience and Philosophy	4
PHIL 660	Law, Medicine, and Ethics	4
Approved PHIL seminars, including seminars in neuroscience, happiness, economic philosophy, race and others		4

Skills and Perspectives for the Digital World Cognate

https://www.unh.edu/program/cognate/skills-perspectives-digital-world

Description

Engage with and reflect on the technology associated with the digital world. This cognate provides a foundation for the development of technical and critical skills aligned with one of the 21st century's defining areas: information technology. A recent statement by General Electric's CEO asserts that if you join the company today, as opposed to 20 years ago, you're going to learn to code even though you may be in sales, finance or operations. This cognate gives students and future employees

a fundamental introduction into technologies that are necessary for high functioning in today's world, both in the workplace and beyond.

The curriculum consists of coursework designed to strengthen understanding of the technologies that drive the World Wide Web, explore computer programming, and consider the impact of the technologies on society.

Requirements

Credit toward the cognate will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the cognate. Courses taken on a pass/fail basis may not be used for the cognate.

Students need to complete a certification of completion of cognate form at the beginning of their final semester.

Code	Title	Credits
Required Courses		
IT 403	Introduction to Internet Technologies	4
CS 410C	Introduction to Scientific Programming/C	4
or CS 410P	Introduction to Scientific Programming/Python	
CS 408	Living in a Networked World: The Good, the Bad, and the Ugly	4
Total Credits		**12**

Studies in Fashion and Design Cognate

https://www.unh.edu/program/cognate/studies-fashion-design

Description

The Studies in Fashion and Design cognate offers students a foundation for developing the basic skills to enter the field of fashion design. It introduces the art behind the creation of apparel and the basics of marketing strategy connected to fashion design. Students will be educated to develop their own creative process and design method while learning the basic knowledge of marketing and personal business. The cognate prepares students with a means to combine their artistic vision with practical application and helps them become designers who have the skills to support their own artistries.

Students complete coursework selected from three groups:

1. Design Creation: Helps students to adapt their artistic skills to support conceptual ideas. It gives students abilities in creating, analyzing, constructing and presenting works for costume creation. It aims to guide students in developing their own working process with a critical approach to problem solving. Students will be able to use terminology to communicate ideas in the fashion design industry.
2. Design Skills: Gives students the options to understand and apply a skill class of their choice to help them articulate their design ideas visually and digitally. It aims to offer students options to create visual merchandising for their design works through rendering hand skills, graphic design software, or photography.
3. Marketing: Helps students to understand and incorporate business aspects into their creative works. It aims to prepare students to promote and sustain their creative works independently as a personal business or within retail organizations.

Requirements

Student must complete three courses (12 credits), one course in each group listed below.

Code	Title	Credits
Design Creation		
Select one course from the following:		4
THDA 546	Costume Design for the Theatre	
THDA 458	Costume Construction	
Design Skills		
Select one course from the following:		4
ARTS 510	Principles of Design	
ARTS 552	Introductory Digital Photography	
Marketing		
Select one course from the following:		4
MKTG 530	Survey of Marketing	
MKTG 547	Promotion and Advertising	
MKTG 649	Foundations of Personal Selling	
Total Credits		**12**

Studies in the Design of Interior Space Cognate

https://www.unh.edu/program/cognate/studies-design-interior-space

Description

This cognate provides students a pathway to enter the world of interior design. It aims to give students an overview of design creation and execution for space planning. From concept development to project execution, the cognate allows students to formulate design projects that are both practical and aesthetically pleasing. Students will develop a comprehensive creative process through research, problem solving and project development. The cognate prepares students to apply critical thinking to the creation of interior environments utilizing a human-centered approach.

Students complete coursework selected from three groups:

1. Design Development: Helps students obtain the skills in design creation. Students will learn about concept development, research analysis, and psychological and physiological characteristics in space planning. It provides students with the ability to utilize knowledge in design elements and principles in 3D design creation and integrate this knowledge into design concepts as solutions for design projects.
2. Historical Aspect: Gives students an overview of architectural history. It will help students to identify the historical, political, social and economic elements that have influenced the evolution of interior architecture and decorative arts. Students will be able to apply their skills in research and their knowledge of historic design styles in their design creations.
3. Design Skills: Helps students to understand and apply skills related to design execution. It provides students with the option to gain craftsmanship in sketching, rendering, scaled design drawings, CAD (computer-aided drafting), graphic solutions or standards.

Requirements

Student must complete three courses (12 credits), one course in each group listed below.

Code	Title	Credits
Design Development		**4**
Select one course from the following:		
THDA 548	Stage Lighting Design and Execution	
THDA 652	Scene Design	
ARTS 520	Principles of Architectural Design	
Historical Aspect		**4**
Select one course from the following:		
ARTH 474	Introduction to Architectural History	
ARTH 480	Introduction to Art History	
Design Skills		**4**
Select one course from the following:		
ARTS 613	Design and Place	
THDA 549	Vectorworks Computer-Aided Design Drafting for the Theatre	
Total Credits		**12**

Technical Writing and Public Speaking Cognate

https://www.unh.edu/program/cognate/technical-writing-public-speaking

Description

The cognate in technical writing and public speaking (TWPS) offers students intensive instruction in oral and written communication as important means of addressing technical, professional or practical problems whose solutions require others' cooperation. Students learn practical precepts for analyzing those "communication situations" and for making informed, strategic decisions when composing oral and written responses in response to them. Students also undergo extensive practice creating standard and, thus, widely applicable forms of spoken and written communication. All students acquire a foundation in effective expression by taking introductory courses in public speaking and in professional and technical writing. Students then build upon that foundation and complete the cognate with one advanced course in either public speaking or professional and technical writing. This cognate is attractive to students who recognize that effective expression is valued in nearly any field of endeavor they are likely to pursue in their post-graduate lives.

Please contact the Liberal Arts Dean's Office for additional information, (603) 862-2062, 110 Murkland Hall.

Requirements

Credit toward the cognate will only be given for courses passed with C- or better, and a 2.00 grade-point average must be maintained in courses for the cognate. Courses taken on the pass/fail basis may not be used for the cognate.

Code	Title	Credits
Required Courses		
Introductory Courses		
CMN 500	Public Speaking	4
ENGL 502	Professional and Technical Writing	4
Advanced Course		
ENGL 602	Advanced Professional and Technical Writing	4
Total Credits		**12**

Communication (CMN)

The Department of Communication at UNH emphasizes a range of studies in human communication, including rhetoric, media and interpersonal communication. Students are taught to analyze verbal, nonverbal and mediated messages from a variety of perspectives including historical, critical, interpretive and empirical approaches. Students explore connections and interrelationships among the people, environments, technologies and messages that comprise the social world.

The communication major prepares students well for a wide variety of careers in business, media, marketing, government, education, health, advocacy and social services. While offering access to a cutting-edge media lab and courses that teach students multi-media production skills, the department's primary focus is analytical rather than vocational. We do not train students to do specific communication tasks, such as managing social media profiles or creating promotional content. Rather, we help students develop an understanding of how communication works the way it does, and how different modes of communication shape understanding and social relations. Students grapple with such "how" and "why" questions as they study real-world political issues, news events, cultural phenomena and communication between friends, family members, colleagues, community members and strangers.

The department is committed to providing a strong liberal arts orientation that helps students develop their abilities to think — to describe, analyze, critique, explore, integrate, synthesize and create ideas. The department's faculty members believe that these are the skills and abilities that will be the most useful resources in students' professional, civic and personal lives after leaving UNH. The program trains students to understand, adapt to and participate in social change. These educational efforts lead to the kind of fundamental understanding that identifies the communication professional and also provides a firm foundation for advanced, graduate study in communication and related fields.

The department's faculty members have a strong national and international reputation for their research and publications. In addition, the department is recognized on campus for its commitment to teaching. About half of the department's tenure-track faculty members have won awards for teaching excellence. The faculty is also very active in university, community and professional service.

The department offers a business applications option for communication majors who want to augment the liberal arts focus of their major with professional training in such areas as marketing, advertising and organizational behavior.

The department offers a media practices option for communication majors who want to augment their major with training in media production and applied media communication through courses at UNH-Manchester Communication Arts Department.

The department also offers internships, which are designed to integrate classroom study and supervised practical experience in a work setting. Internship credits do not count toward completion of the communication major, but they do contribute to the total number of credits needed for graduation.

https://cola.unh.edu/communication

Programs

- Communication Major (B.A.) (p. 243)
- Communication Major: Business Applications Option (B.A.) (p. 245)
- Communication Major: Media Practices Option (B.A.) (p. 247)
- Communication Minor (p. 249)

Faculty

Communications Department Faculty

Communication Major (B.A.)

https://www.unh.edu/program/bachelor-arts/communication

Description

The purpose of the communication major is to prepare students to engage more knowingly with the communicative patterns, problems and practices that they will encounter in their personal, professional and civic lives. This purpose requires that students learn to move beyond commonplace and conventional understandings of "communication" and acquire sophisticated perspectives — workable orientations — for describing, analyzing, reflecting upon and engaging with those patterns, problems and practices. Accordingly, the major not only acquaints students with a variety of empirical, critical, historical, theoretical and pragmatic perspectives on communication phenomena, but encourages them to formulate workable orientations of their own for engaging with communication issues and questions. Students who graduate with a communication major are prepared to become thoughtful and proficient "communication decision-makers" during their postgraduate lives.

Students wishing to declare communication as a major should contact the department's academic adviser, Andrew Sharp (andrew.sharp@unh.edu), for application information and requirements.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Majors must complete ten courses (40 credits) with a 2.0 overall average in the major. The distribution of required courses for the major is as follows:

Code	Title	Credits
Required Courses		
Select two introductory courses from the following: [1]		8
CMN 455	Introduction to Media Studies	
CMN 456	Propaganda and Persuasion	
CMN 457	Introduction to Language and Social Interaction	
Select three 500-level communication analysis courses [2]		12
Select four upper-division courses [3]		16
Select one elective course at any level		4
Total Credits		**40**

1
- Majors must earn a grade of C or better in each introductory course.

2
- Students must complete at least one 400-level course before taking their first 500-level course. They must complete a second 400-level course before taking their second and third 500-level course.
- Students must take at least two of their 500-level courses in different thematic areas corresponding to the 400-level courses (but it is not necessary to have taken the corresponding 400-level course to enroll in the corresponding 500-level course).
- Majors must earn a grade of C- or better in all three analysis courses.
- CMN 500 Public Speaking and CMN 599 Internship cannot be used to fulfill an analysis course requirement.

3
- Students are eligible to take upper-division courses after successfully completing at least two of the 500-level analysis courses, each from a different thematic area.
- At least one of the student's four upper-division courses must be at the 700 level.
- Majors must earn a grade of C- or better in all upper-division courses.
- Up to four credits of CMN 795 can be used towards the major, but can only fulfill the capstone requirement with department approval.
- CMN 796 Comm-Entary Journal cannot be used to fulfill the advanced-level requirement.

A maximum of 8 credits of independent study (CMN 795 Independent Study) may be counted toward the major. CMN 799H Honors Thesis and CMN 796 Comm-Entary Journal cannot be used to fulfill an advanced course requirement. The Discovery Program Capstone requirement may be fulfilled by completing any 700-level communication course except CMN 796 Comm-Entary Journal. CMN 795 Independent Study can only fulfill the capstone requirement with department approval and can be repeated for a maximum of 8 credits.

Transfer students must complete 20 credits of their communication coursework at UNH to complete the major satisfactorily. Exchange students may transfer no more than 10 approved credits from another institution to be applied toward completion of the communication major at UNH.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Major department courses may not be used to satisfy Discovery category requirements except in the case of a second or dual major.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
CMN 455	Introduction to Media Studies	4
Language Course		4
Discovery Course		4
First Year Seminar		1
	Credits	**17**
Spring		
Language Course		4
CMN 456	Propaganda and Persuasion	4
Discovery & Inquiry Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
CMN 457	Introduction to Language and Social Interaction	4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
CMN 500-level Course		4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
CMN 500-level Course		4
Minor/Elective Course		4
Minor/Elective Course		4
Minor/Elective Course		4
	Credits	**16**
Spring		
CMN 500-level Course		4
Minor/Elective Course		4
Minor/Elective Course		4
Minor/Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
CMN 600-level Course		4
CMN 600-level Course		4
Minor/Elective Course		4
Minor/Elective Course		4
	Credits	**16**
Spring		
CMN 700-level /Capstone Course		4
CMN 600-level Course		4
Minor/Elective Course		4
Minor/Elective Course		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to describe the Communication discipline and its central questions. We expect students to be able to:

- Explain and synthesize the history of Communication theory.
- Articulate the differences between approaches within the discipline (media studies, language and social interaction, and rhetorical studies).
- Identify contemporary debates within the field.
- Distinguish Communication scholarship from other areas of study.
- Understand the role of Communication scholarship in society.
- Articulate the relevance of communication in civic life, including an ability to apply key concepts in the field to world events, situations, or problems.

Students will be able to think critically about communication processes by applying communication theories and concepts. We expect students to be able to:

- Identify theories, perspectives, principles, and concepts relevant to the discipline.
- Recognize academic writing, identify the work's thesis, explain its method, assess the evidence used, and determine its significance.
- Engage with communicative patterns, processes, problems, and practices that they encounter in their personal, professional and civic lives.
- Acquire effective frameworks for describing, analyzing, reflecting upon, and engaging with those patterns, processes, problems, and practices.

Prepare students to become thoughtful and proficient communicators. We expect students to be able to:

- Become critical consumers of messages.
- Understand how meanings are constructed by speakers and audiences.
- Evaluate claims and arguments, and to be able to explain how they are grounded.
- Recognize the collaborative construction of meaning and its relation to social change.
- Explore the ways in which various forms of communication constitute, maintain, and transform social life.
- Formulate coherent arguments/theses, provide support for their perspectives, and communicate them clearly and logically.
- Select creative and appropriate modalities and technologies to accomplish communicative goals.

- Adapt messages and coordinate communication with others recognizing the diverse needs.

Communication Major: Business Applications Option (B.A.)

https://www.unh.edu/program/bachelor-arts/communication-business-applications

Description

The Department of Communication, in collaboration with the Department of Marketing and the Department of Management in the Peter T. Paul College of Business and Economics, offers a business applications option for communication students. The objective of the business applications option is to offer a select group of communication students the opportunity to augment the liberal arts focus of their major with professional training in such areas as marketing, advertising and organizational behavior. Qualified students who meet all requirements will graduate[1] with a B.A. degree in communication: business applications, an achievement which will be recorded on their official transcripts.

Minimum Requirements for Option Eligibility

1. Declared communication major.

2. Completion of CMN 455 Introduction to Media Studies, CMN 456 Propaganda and Persuasion, and CMN 457 Introduction to Language and Social Interaction with a C or better.

3. Completion of at least one CMN 500-level course with a C- or better.

4. Maintain minimum in-major GPA of 2.5.

- Student enrollment in the Business Applications Option will be contingent upon **space availability**.
- Overall, total enrollment should **not exceed twenty students** in any given academic year.

[1] Students admitted to the option must earn a minimum 2.5 cumulative grade point average in major courses at graduation or they will, by default, graduate with a BA in Communication without the special option designation on their diplomas.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Majors must complete ten courses (40 credits) with a 2.0 overall average in the major.

Code	Title	Credits
Required Courses		
Introductory Courses		
CMN 455	Introduction to Media Studies [1]	4
CMN 456	Propaganda and Persuasion [1]	4
CMN 457	Introduction to Language and Social Interaction [1]	4
Communication Analysis Courses		
Select three 500-level courses [2]		12
Communication Upper-Division Electives		
Select four 600/700-level courses [3]		16
Total Credits		**40**

[1]
- Majors must earn a grade of C or better in each introductory course.

[2]
- Students must complete the 400-level prerequisite before taking a 500-level course.
- At least two of the three 500-level courses must have different 400-level prerequisites.
- Majors must earn a grade of C- or better in all three analysis courses.
- CMN 500 Public Speaking and CMN 599 Internship cannot be used to fulfill an analysis course requirement.

[3]
- Students are eligible to take upper-division courses after successfully completing at least two of the 500-level analysis courses, each with a different 400-level prerequisite.
- At least one of the student's four upper-division courses must be at the 700 level.
- Majors must earn a grade of C- or better in all upper-division courses.
- Up to four credits of CMN 795 can be used towards the major, but can only fulfill the capstone requirement with department approval.
- CMN 796 Comm-Entary Journal cannot be used to fulfill the advanced-level requirement.

Code	Title	Credits
Business Applications Option Requirements		
Required Courses		
ADMN 400	Introduction to Business	4
CMN 599	Internship [1]	4
Select two courses from the following:		8
MGT 520	Topics in Management	
MKTG 520	Topics in Marketing	
MKTG 530	Survey of Marketing	
MGT 535	Organizational Behavior	
Total Credits		**16**

[1] Students undergo a business applications internship experience that must be completed in one semester. (Prerequisites: CMN 455, CMN 456, CMN 457)

Capstone Requirement

The Discovery Program Capstone requirement may be fulfilled by completing any 700-level communication course except CMN 796 Comm-Entary Journal. CMN 795 Independent Study can only fulfill the

capstone requirement with department approval and can be repeated for a maximum of 8 credits.

Additional Information

- A maximum of 8 credits of CMN 795 Independent Study may be counted toward the major.
- CMN 799H and CMN 796 cannot be used to fulfill an advanced course requirement.

Transfer students must complete 20 credits of their communication coursework at UNH to complete the major satisfactorily. Exchange students may transfer no more than 10 approved credits from another institution to be applied toward completion of the communication major at UNH.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Major department courses may not be used to satisfy Discovery category requirements except in the case of a second or dual major.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
CMN 455	Introduction to Media Studies	4
Language Course		4
Discovery Course		4
First Year Seminar		1
	Credits	**17**
Spring		
Language Course		4
CMN 456	Propaganda and Persuasion	4
Discovery & Inquiry Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
CMN 457	Introduction to Language and Social Interaction	4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
CMN 500-level Course		4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
CMN 500-level Course		4
ADMN 400	Introduction to Business	4
Minor/Elective Course		4
Minor/Elective Course		4
	Credits	**16**
Spring		
CMN 500-level Course		4
Business Elective Course		4
Minor/Elective Course		4
Minor/Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
CMN 600-level Course		4
CMN 600-level Course		4
Business Elective Course		4
Minor/Elective Course		4
	Credits	**16**
Spring		
CMN 700-level /Capstone Course		4
CMN 600-level Course		4
CMN 599	Internship	4
Minor/Elective Course		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to describe the Communication discipline and its central questions. We expect students to be able to:

- Explain and synthesize the history of Communication theory.
- Articulate the differences between approaches within the discipline (media studies, language and social interaction, and rhetorical studies).
- Identify contemporary debates within the field.
- Distinguish Communication scholarship from other areas of study.
- Understand the role of Communication scholarship in society.
- Articulate the relevance of communication in civic life, including an ability to apply key concepts in the field to world events, situations, or problems.

Students will be able to think critically about communication processes by applying communication theories and concepts. We expect students to be able to:

- Identify theories, perspectives, principles, and concepts relevant to the discipline.
- Recognize academic writing, identify the work's thesis, explain its method, assess the evidence used, and determine its significance.

- Engage with communicative patterns, processes, problems, and practices that they encounter in their personal, professional and civic lives.
- Acquire effective frameworks for describing, analyzing, reflecting upon, and engaging with those patterns, processes, problems, and practices.

Prepare students to become thoughtful and proficient communicators. We expect students to be able to:

- Become critical consumers of messages.
- Understand how meanings are constructed by speakers and audiences.
- Evaluate claims and arguments, and to be able to explain how they are grounded.
- Recognize the collaborative construction of meaning and its relation to social change.
- Explore the ways in which various forms of communication constitute, maintain, and transform social life.
- Formulate coherent arguments/theses, provide support for their perspectives, and communicate them clearly and logically.
- Select creative and appropriate modalities and technologies to accomplish communicative goals.
- Adapt messages and coordinate communication with others recognizing the diverse needs.

Communication Major: Media Practices Option (B.A.)

https://www.unh.edu/program/bachelor-arts/communication-media-practices

Description

The Department of Communication, in collaboration with the Communication Arts Department at the UNH Manchester campus, offers the media practices option. This option is designed for qualified students who want to augment their communication major at Durham with training in media production and applied media communication through courses in the Communication Arts Department at the Manchester Campus.[1] Qualified students who meet all requirements will graduate with a B.A. degree in communication with a media practices option, an achievement which will be recorded on their official transcripts.

Minimum Requirements for Option Eligibility

1. Declared Communication Major.
2. Completion of CMN 455 Introduction to Media Studies, CMN 456 Propaganda and Persuasion, and CMN 457 Introduction to Language and Social Interaction with a C or better.
3. Maintain minimum in-major GPA of 2.5.

[1] Students are responsible for their own travel arrangements between Durham and Manchester campuses.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Major Requirements

Majors must complete ten courses (40 credits) with a 2.0 overall average in the major.

Major department courses may not be used to satisfy Discovery category requirements except in the case of a second or dual major.

Code	Title	Credits
Required Courses		
Select two introductory courses from the following:		8
CMN 455	Introduction to Media Studies [1]	
CMN 456	Propaganda and Persuasion [1]	
CMN 457	Introduction to Language and Social Interaction [1]	
Communication Analysis Courses		
Select three 500-level courses [2]		12
Communication Upper-Division Electives		
Select four 600/700-level courses [3]		16
Elective		
Select one elective course at any level		4
Total Credits		**40**

[1]
- Majors must earn a grade of C or better in each introductory course.

[2]
- Students must complete at least one 400-level course before taking their first 500-level course. They must complete a second 400-level course before taking their second and third 500-level course.
- Students must take at least two of their 500-level courses in different thematic areas corresponding to the 400-level courses (but it is not necessary to have taken the corresponding 400-level course to enroll in the corresponding 500-level course).
- Majors must earn a grade of C- or better in all three analysis courses.
- CMN 500 Public Speaking and CMN 599 Internship cannot be used to fulfill an analysis course requirement.

[3]
- Students are eligible to take upper-division courses after successfully completing at least two of the 500-level analysis courses, each from a different thematic area.
- At least one of the student's four upper-division courses must be at the 700 level.

- Majors must earn a grade of C- or better in all upper-division courses.
- Up to four credits of CMN 795 can be used towards the major, but can only fulfill the capstone requirement with department approval.
- CMN 796 Comm-Entary Journal cannot be used to fulfill the advanced-level requirement.

Code	Title	Credits
Media Practices Option Requirements		
Select two courses from the following: [1]		8
CA 500	Media Writing	
ARTS 510	Principles of Design	
ARTS 611	Animation and Motion Design	
ARTS 612	Interaction & Game Design	
ARTS 613	Design and Place	
ARTS 614	Design and People	
CA 500	Media Writing	
CA 502	Image and Sound (Manchester)	
CA 512	Screenwriting (Manchester)	
CA 514	Fundamentals of Video Production (Manchester)	
CA 515	Advanced Video Production (Manchester)	
CA 517	Fundamentals of Audio Prod (Manchester)	
CA 520	Special Topics in Applied Communication (Manchester)	
IT 403	Introduction to Internet Technologies	
IT 502	Intermediate Web Design	
Internship		
Based on work experience at a site directly relevant to applied media practices or production completed in one semester. Junior standing is required. [2]		
CMN 599	Internship	4

1 Students may arrange to take Media Practices (CA) courses at any time during the course of their academic programs after they have satisfactorily completed the three 400-level introductory courses. Thus, students may take the 500-level CA courses before, concurrently with, or after completion of CMN 500-level courses and/or CMN 600-level courses.

2 Visit our Internships webpage for procedures on how to arrange internships.

Capstone Requirement

The Discovery Program Capstone requirement may be fulfilled by completing any 700-level communication course except CMN 796. CMN 795 can only fulfill the capstone requirement with department approval and can be repeated for a maximum of 8 credits.

Additional Information

- A maximum of 8 credits of CMN 795 Independent Study may be counted toward the major.
- CMN 799H and CMN 796 cannot be used to fulfill an advanced course requirement.

Transfer students

Must complete 20 credits of their communication coursework at UNH to complete the major satisfactorily. Exchange students may transfer no more than 10 approved credits from another institution to be applied toward completion of the communication major at UNH.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
Language Course		4
CMN 455	Introduction to Media Studies	4
Discovery Course		4
First Year Seminar		1
	Credits	**17**
Spring		
Language Course		4
CMN 456	Propaganda and Persuasion	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
CMN 457	Introduction to Language and Social Interaction	4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
CMN 500-level Course		4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
CMN 500-level Course		4
Media Practices Elective Course		4
Minor/Elective Course		4
Minor/Elective Course		4
	Credits	**16**
Spring		
CMN 500-level Course		4
Media Practices Elective Course		4
Minor/Elective Course		4
Minor/Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
CMN 600-level Course		4
CMN 600-level Course		4

Minor/Elective Course		4
Minor/Elective Course		4
	Credits	**16**
Spring		
CMN 700-level/Capstone Course		4
CMN 600-level Course		4
CMN 599	Internship	4
Minor/Elective Course		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to describe the Communication discipline and its central questions. We expect students to be able to:

- Explain and synthesize the history of Communication theory.
- Articulate the differences between approaches within the discipline (media studies, language and social interaction, and rhetorical studies).
- Identify contemporary debates within the field.
- Distinguish Communication scholarship from other areas of study.
- Understand the role of Communication scholarship in society.
- Articulate the relevance of communication in civic life, including an ability to apply key concepts in the field to world events, situations, or problems.

Students will be able to think critically about communication processes by applying communication theories and concepts. We expect students to be able to:

- Identify theories, perspectives, principles, and concepts relevant to the discipline.
- Recognize academic writing, identify the work's thesis, explain its method, assess the evidence used, and determine its significance.
- Engage with communicative patterns, processes, problems, and practices that they encounter in their personal, professional and civic lives.
- Acquire effective frameworks for describing, analyzing, reflecting upon, and engaging with those patterns, processes, problems, and practices.

Prepare students to become thoughtful and proficient communicators. We expect students to be able to:

- Become critical consumers of messages.
- Understand how meanings are constructed by speakers and audiences.
- Evaluate claims and arguments, and to be able to explain how they are grounded.
- Recognize the collaborative construction of meaning and its relation to social change.
- Explore the ways in which various forms of communication constitute, maintain, and transform social life.
- Formulate coherent arguments/theses, provide support for their perspectives, and communicate them clearly and logically.
- Select creative and appropriate modalities and technologies to accomplish communicative goals.
- Adapt messages and coordinate communication with others recognizing the diverse needs.

Communication Minor

https://www.unh.edu/program/minor/communication

Description

Students who enroll in a communication minor have the flexibility of structuring their pathway of five courses to explore the ways in which various forms of communication constitute, maintain and transform social life. The program trains students to understand, adapt to and participate in social change. We offer courses in media studies, rhetoric and face-to-face interaction. We'll encourage you to "learn how to learn," to become clear and precise writers, and to develop your abilities to think — to describe, analyze, critique, explore, integrate, synthesize and create ideas. The department's faculty members believe that these are the skills and abilities of a strong liberal arts education that will be the most useful resources in students' professional, civic and personal lives after leaving UNH.

Contact the Communication Department for more information about the minor.

Requirements

Academic policies related to Minors.

The Communication Minor consists of completing five courses (20 credits) in Communication (CMN).

- A minimum grade of C or better is required for coursework at the 400-level and a minimum grade of C- or better for coursework at the 500, 600, and 700-levels.
- Students must maintain a minimum grade-point average of 2.0.

Code	Title	Credits
Required Courses		
Select five (5) Communication courses		20
Total Credits		**20**

CMN 500 Public Speaking and CMN 599 Internship may not be counted toward the minor requirements.

A maximum of 4 credits of independent study can count toward the minor.

Education (EDUC)

Undergraduate course work in Education engages students in a diverse and varied collection of educational experiences that prepare them for present and future challenges as well as for a wide range of employment opportunities in education and professional settings engaged in education policy, community-based education, and advocacy.

Accelerated Master's Program

UNH undergraduate students with a 3.2 or higher cumulative grade-point average (GPA) can apply for "early admission" to the Graduate School either one or two semesters prior to their final semester as an undergraduate. Admitted students may register for a maximum of 12 credits of dual-credit coursework (undergraduate & graduate level

coursework) prior to completing their bachelor's degree. To receive graduate credit, students must be admitted to the Graduate School before the start of the semester in which the course(s) will be taken and need to maintain a 3.2 GPA or higher until their undergraduate degree is awarded. Applying for early admission involves the regular Graduate School application at www.gradschool.unh.edu.

Program Philosophy

The professional education unit at the University of New Hampshire seeks to prepare practitioners who will become leaders in their own practice settings and within their profession, applying knowledge to improve education for all students and enrich the lives of clients. Immersion in subject matter, research, theory and field-based experience provide a base for our graduates to make well-reasoned judgments in complex situations, render informed decisions, model exemplary practice, and take initiative for planned change.

Students learn to establish caring and thoughtful environments that celebrate individual differences and backgrounds while fostering cooperation and educational improvement. We stress reflective critical inquiry as a mode of study and community-building as a means to promote change. We value and support both our students' local practice and their broader leadership within the profession.

https://cola.unh.edu/education

Programs

- Education (B.A.) (p. 250)
- Education Four-Year, Undergraduate Options (p. 252)
- Education Minor (p. 252)
- Educational Studies Dual Major (p. 252)
- Special Education Minor (p. 254)

Faculty

Education Department Faculty

Education (B.A.)

https://www.unh.edu/program/bachelor-arts/education

Description

The Education major offers opportunities to integrate knowledge and research methodologies from several academic disciplines and field sites into a focused examination of the interdisciplinary field of education. The four-year Education major is designed for students who seek a rich understanding of education grounded in science, the arts, and the humanities.

The goal of the program is to graduate civically, globally, and intellectually engaged students who understand the complexities of education, are capable of analyzing and evaluating complex problems influencing education from a variety of disciplinary perspectives, and are committed to becoming leaders and role models in the communities in which they work. Program graduates will be prepared for present and future challenges as well as for a wide range of employment opportunities in educational and professional settings engaged in educational policy, community-based education, and educational advocacy.

The BA in Education does not lead to teacher licensure. Students in the Education major interested in a licensure program (e.g., Elementary School teaching) may apply to the Accelerated Master's program at UNH and potentially finish both the BA in Education and MEd in five years.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Candidates for a degree must satisfy all of the University Discovery Program and Writing Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of Arts candidates must also satisfy the foreign language proficiency requirement.

Major Requirements

The Education BA requires 52 credits, with each course completed with a **B- or better**. The required minimum overall GPA in major coursework is 3.0.

Code	Title	Credits
Required Foundations Courses		
EDUC 402	Introduction to Educational Studies: Social Change and Education in Local and Global Contexts	4
EDUC 500	Exploring Teaching	4
EDUC 550	Language and Linguistic Diversity in Schools	4
EDUC 605	Educational Perspectives in Critical Times	4
EDUC 656	Advocating for Diverse and Inclusive Family-School-Community Partnerships	4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
or PSYC 581	Child Development	
Total Credits		**24**

Code	Title	Credits
Required Courses		
Select one course from the following:		4
EDUC 520	Education, Poverty, and Development	
EDUC 525	The Idea of Race in Teaching and Learning	
Supporting Communities		
Select two electives from the following in consultation with advisor:		8
ENGL 405	Introduction to Linguistics	
LING 405	Introduction to Linguistics	
EDUC 506	Mentoring Readers and Writers in the Elementary Grades	
EDUC 556	Peer to Peer Mentoring for Students with Disabilities	
EDUC 650	Introduction to Disability in Inclusive Schools and Communities	
EDUC 718	Critical Social Justice in and Beyond Education	
EDUC 739	Assessment and Individualized Educational Planning in Special and Inclusive Education	
EDUC 740	Methods for Supporting Students in Special Education Using Intensive Interventions	
ENGL 716	Curriculum, Materials and Assessment in English as a Second Language	
Additional courses may be selected in consultation with advisor in the following subject areas: Justice Studies, Gender Studies, Health and Physical Education, Arts, Theater, and Psychology.		

Curriculum and Methods		
Select two courses from the following:		8
EDUC 703C	Classroom Management: Creating Positive Learning Environments	
EDUC 703F	Teaching Elementary School Science	
EDUC 703M	Teaching Elementary Social Studies	
EDUC 706	Teaching & Learning Literacy in the Elementary Classroom	
EDUC 712	Teaching Multilingual Learners	
EDUC 733	Teaching Writing in the Elementary Grades	
EDUC 734	Critical Perspectives on Children's Literature	
EDUC 751A	Inclusive Elementary Education: Literacies and Learning for Diverse Learners	
EDUC 761	Designing Curriculum for Inclusive, Equitable Settings for Young Children (birth-8)	
MATH 601	Exploring Mathematics for Teachers I	
MATH 703	Teaching of Mathematics in Grades K-6	
Culminating Experience		
EDUC 784	Educators as Engaged Researchers and Reflective Professionals	4
or EDUC 795	Independent Study	
Total Credits		**24**

Education Language Requirement

The bachelor of arts degree at the University of New Hampshire requires that students satisfy the foreign language proficiency requirement. The requirement may be met by demonstrating language proficiency equal to a one-year college-level course (401 and 402, 403 and 503, 501 [Latin only], or 503 and above in a spoken language). American Sign Language courses meet the foreign language proficiency requirement for Education majors when COMM 401 and COMM 502 have been completed.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
EDUC 402	Introduction to Educational Studies: Social Change and Education in Local and Global Contexts	4
ENGL 401	First-Year Writing	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
EDUC 550	Language and Linguistic Diversity in Schools	4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
EDUC 605	Educational Perspectives in Critical Times	4
Discovery Course		4
Foreign Language Course		4
EDUC 500	Exploring Teaching	4
	Credits	**16**
Spring		
EDUC 656	Advocating for Diverse and Inclusive Family-School-Community Partnerships	4
Discovery Course		4
Foreign Language Course		4
Elective Course		4
	Credits	**16**
Third Year		
Fall		
EDUC 520 or EDUC 525	Education, Poverty, and Development or The Idea of Race in Teaching and Learning	4
Supporting Communities Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
Curriculum and Methods Course		4
Supporting Communities Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
EDUC 701	Human Development & Learning: Cultural Perspectives	4
Supporting Communities Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
EDUC 795	Independent Study	2-4
Curriculum and Methods Course		4
Elective Course		4
Elective Course		4
	Credits	**14-16**
	Total Credits	**126-128**

Student Learning Outcomes

Program Learning Outcomes

- GOAL ONE: Our students analyze the social dimensions of education, including culture, gender, equity, health and economics.
- GOAL TWO. Our students demonstrate depth of knowledge in their subjects; recognize how knowledge in their subjects is created, organized and linked to other disciplines; identify the organizing themes and central concepts necessary for understanding a subject; and identify associated content necessary for students to understand these themes and concepts.
- GOAL THREE. Our students understand how students develop and learn; treat students equitably and work diligently to help each student reach their potential; and create and maintain an atmosphere conducive to learning.

- GOAL FOUR. Our students make well-reasoned choices and decisions within the complex and demanding conditions of teaching. They analyze the effects of their actions and make appropriate changes. They consider the moral and philosophical implications of educational decisions. They improve their practice by reflecting on their own experience, observing others, seeking advice and drawing upon educational research and scholarship.
- GOAL FIVE. Our students assess the relative merits of educational reform efforts and determine their appropriateness to the classroom, school and broader societal contexts in which teaching and learning occur. They develop and articulate their own conceptual and philosophical perspective on teaching and learning based on professional experience and current theories and research in education. They understand the nature of educational change, the teacher's role in the change process, and are willing to take risks as advocates for the benefit of students, teachers, and the profession.
- GOAL SIX. Our students are active members of learning and professional communities. They work with colleagues to enhance their own teaching, learning and professional development, and work collaboratively with students, peers, and community members to create and contribute to effective learning environments.

Education Four-Year, Undergraduate Options

https://cola.unh.edu/education/program/bs/education-four-year-undergraduate-options-ba-bm

Description

A bachelor's degree, including a one-semester student-teaching requirement, allows students to be recommended for licensure in the following specialized programs:

- Health and Physical Activity Promotion Major: Health and Physical Education Teacher Licensure Option (B.S.)
- Human Development and Family Studies Major: Early Childhood Education Teacher Licensure Option (B.S.)
- Mathematics Education Major (B.S.)
- Music Education Major (B.M.)
- Theatre Major: Secondary Theatre Education Option (B.A.)

Requirements

For the specialized areas listed on the Description tab, students must fulfill requirements for the major appropriate for the licensure being sought, in addition to the following core professional courses or their equivalent:

Code	Title	Credits
EDUC 500	Exploring Teaching	4
EDUC 605	Educational Perspectives in Critical Times	4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
EDUC 751A	Inclusive Elementary Education: Literacies and Learning for Diverse Learners	4
or EDUC 751B	Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	
EDUC 694	Courses in Supervised Teaching	8

- A minimum 2.8 cumulative grade-point average at the time of application to student teaching is required.
- Students in music, mathematics, and physical education need to apply by March 1st of the junior year and October 15th of the senior year for spring semester to the Education Department for student teaching.
- An unofficial transcript and a current resume must accompany the application. Return applications to the Education Department Office, 203 Morrill Hall, or Education.Department@unh.edu.

Education Minor

https://www.unh.edu/program/minor/education

Description

Education is happening everywhere, beyond schools and universities. Our education minor offers a broad understanding of the field and is a great way to combine your interests with your major course of study. You will learn about the various perspectives, structures, and issues that arise in education across contexts. In this highly flexible program, you'll choose electives in areas ranging from teaching methods to language and literacy to special education.

Requirements

Academic policies related to Minors.

A minor consists of five courses, twenty (20) credits in Education Department courses.

Code	Title	Credits
Select five (5) education courses		20
Total Credits		**20**

A methods course located in another department may be counted for four (4) of these twenty (20) credits (e.g., ARTS 791 or ARTS 792, ENGL 792, MATH 709, etc.).

No more than eight (8) credits used by the student to satisfy major requirements may be used for the minor.

Courses used in obtaining a minor in special education cannot be used towards a minor in education.

EDUC 500 Exploring Teaching can only be counted once (four credits) towards the minor.

No more than two (2) transferred courses in Education or a closely-related area from another college or university may be used towards a minor in Education. A three-credit (3) course transferred from another school will count for three credits (3) at UNH, not four credits (4).

Educational Studies Dual Major

https://www.unh.edu/program/dual-major/educational-studies

Description

The Educational Studies Dual Major (ESDM) program is for students interested in the foundations, philosophy, paradigms, research, and social structures of education. This flexible, rigorous, transdisciplinary program bridges community engagement with theoretical explorations. Students analyze, evaluate, and develop approaches to challenges

facing education in the context of organizations, cultures, history, and technologies. The program integrates fieldwork and research in a range of educational settings, including classrooms, museums, and nonprofits. It is relevant for future educators, policymakers, researchers, and those who wish to deepen their knowledge of education as informed citizens.

The ESDM does not lead to teacher licensure. Students interested in a licensure program (e.g., Elementary School teacher) may apply to the Accelerated Master's program at UNH and potentially finish both the ESDM and MEd in five years.

Students who are interested in a dual major in Educational Studies will need to file an*Intent to Dual Major Form*. For more information, please contacteducation.department@unh.edu.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes, if primary major is a Bachelor of Arts

Declared Primary Major

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Candidates for a degree must satisfy all of the University Discovery Program and Writing Program requirements in addition to satisfying the requirements of each individual major program. Students interested in the dual major in Educational Studies will need to file an Intent to Dual Major Form. For more information contact the department at education.department@unh.edu.

Educational Studies Dual Major Requirements

The educational studies dual major requires **32 credits**, each course completed with a **C+ or better**. Any education course to be applied for a teacher licensure requirement must be completed with a grade of **B- or better**. The dual major cannot be declared until after a first major has been declared. Students must have a UNH undergraduate GPA of a 2.50 or better at the time of declaring the dual major. The required minimum overall GPA in major coursework is 2.50.

If the student's primary major is a Bachelor of Arts, the foreign language proficiency requirement must also be fulfilled.

Code	Title	Credits
Required Courses		
Foundations		
EDUC 402	Introduction to Educational Studies: Social Change and Education in Local and Global Contexts	4
EDUC 500	Exploring Teaching	4
or EDUC 520	Education, Poverty, and Development	
EDUC 605	Educational Perspectives in Critical Times	4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
Elective Courses		
Select three (3) elective courses, providing students with opportunities for focused inquiry in educational studies. Students may either emphasize a single cluster or take elective coursework in more than one cluster below:		12
Instructional Methods in Schools		
Select from the following:		
EDUC 703C	Classroom Management: Creating Positive Learning Environments	
EDUC 703F	Teaching Elementary School Science	
EDUC 703M	Teaching Elementary Social Studies	
EDUC 706	Teaching & Learning Literacy in the Elementary Classroom	
MATH 601	Exploring Mathematics for Teachers I	
MATH 703	Teaching of Mathematics in Grades K-6	
Language and Literacy		
Select from the following:		
EDUC 506	Mentoring Readers and Writers in the Elementary Grades	
EDUC 550	Language and Linguistic Diversity in Schools	
EDUC 712	Teaching Multilingual Learners	
EDUC 734	Critical Perspectives on Children's Literature	
Special Education		
Select from the following:		
EDUC 556	Peer to Peer Mentoring for Students with Disabilities	
EDUC 650	Introduction to Disability in Inclusive Schools and Communities	
EDUC 656	Advocating for Diverse and Inclusive Family-School-Community Partnerships	
EDUC 751A	Inclusive Elementary Education: Literacies and Learning for Diverse Learners	
EDUC 751B	Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	
EDUC 760	Introduction to Young Children with Special Needs	
EDUC 761	Designing Curriculum for Inclusive, Equitable Settings for Young Children (birth-8)	
Supporting Communities		
Select from the following:		
ENGL 405	Introduction to Linguistics	
LING 405	Introduction to Linguistics	
EDUC 520	Education, Poverty, and Development	
EDUC 525	The Idea of Race in Teaching and Learning	
EDUC 718	Critical Social Justice in and Beyond Education	
Capstone Course		
Select one of the following:		4
EDUC 784	Educators as Engaged Researchers and Reflective Professionals	
EDUC 795	Independent Study	
INCO 790 Advanced Research Experience and URC Presentation		
McNair Research Thesis		
A capstone in the first major, if related to an Educational Studies project and approved by both advisors and the director of Undergraduate Studies.		
Total Credits		**32**

Student Learning Outcomes

Program Learning Outcomes

GOAL ONE:

- Our students effectively analyze the social dimensions of education, to include issues of culture, gender, equity, health, and economics. Specifically, students will:
- demonstrate understanding of the history and politics of education including the principles, assumptions and impacts of school reform initiatives, education, international development and economic globalization as well as alternatives for defining and pursuing diverse conceptions of education, quality of life, and equity.
- demonstrate understanding of how economics and markets shape private and public actions and outcomes with respect to education on local, regional, national and global scales.
- demonstrate understanding of the origins, similarities and differences among concepts of diversity, universality, pluralism, multiculturalism, and cosmopolitanism and their implications for education in formal and informal at a variety of scales.

- demonstrate understanding of the roles of gender, race, ethnicity, and economic class in affecting education in formal and informal settings.
- demonstrate cultural self-awareness and cultural sensitivity in analysis, synthesis, visioning, design and intervention related to studies in education.
- demonstrate an understanding of the connection between public health and education.

GOAL TWO:

- Our students engage diverse histories of education in the context of civic engagement, activism, and commitment to equity and justice for Social Good. Specifically, students will:
- demonstrate understanding of the relationship between awareness and action and be able to articulate theories of ethics and civic engagement in the context of educational initiatives on local, national and international levels.
- demonstrate understanding of the principles, assumptions and frameworks of educating for equity and justice from diverse perspectives.
- critique these issues based on their direct experience in "engaged learning" projects.

GOAL THREE:

- Our students will demonstrate depth of knowledge in their subjects; recognize how knowledge in their subjects is created, organized and linked to other disciplines; identify the organizing themes and central concepts necessary for understanding a subject; and identify associated content necessary for students to understand these themes and concepts.

GOAL FOUR:

- Our students will understand how students develop and learn; treat students equitably and work diligently to help each student reach their potential; and create and maintain an atmosphere conducive to learning.

GOAL FIVE:

- Our students will be active members of learning and professional communities. They work with colleagues to enhance their own teaching, learning and professional development and work collaboratively with students, peers and community members to create and contribute to effective learning environments.

GOAL SIX:

- Our students will make well-reasoned choices and decisions within the complex and demanding conditions of teaching. They analyze the effects of their actions and make appropriate changes. They consider the moral and philosophical implications of educational decisions. They improve their practice by reflecting on their own experience, observing others, seeking advice and drawing upon educational research and scholarship.

Special Education Minor

https://www.unh.edu/program/minor/special-education

Description

In the special education minor, you will engage in an informed, evidence-based examination of inclusive (formerly “special") education and study fundamental issues of values, purposes, and practices in public education systems. The concept of disability in education has a dual nature. It has been represented as a mechanism of protection within schools that recruits efforts and resources to develop all individuals’ abilities and to ensure their meaningful, full participation in society. Disability identification has also been a mechanism for exclusion and inequity, including long-standing intersections with race, language, class, and gender, among others. This minor can be combined with other majors and can provide an accelerated pathway to the Education Department’s professional graduate preparation programs, particularly the M.Ed. in special education.

Requirements

Academic policies related to Minors.

- The Minor in Special Education consists of completing five Education Department courses for a total of twenty (20) credits.
- The Minor in Special Education does not lead to a teaching certification.
- No more than eight (8) credits used by the student to satisfy major requirements may be used for the minor.
- Courses used in obtaining a Minor in Education cannot be used towards the Minor in Special Education.
- EDUC 500 can only be counted once for four (4) credits towards the minor, if the placement was with a special educator.
- No more than two (2) transferred courses in education or a closely-related area from another college or university may be used towards a Minor in Special Education. A three (3) credit course transferred from another school will count for three (3) credits at UNH.

Code	Title	Credits
Required Courses		
EDUC 650	Introduction to Disability in Inclusive Schools and Communities	4
EDUC 656	Advocating for Diverse and Inclusive Family-School-Community Partnerships	4
Electives		
Select three courses from the following:		12
EDUC 556	Peer to Peer Mentoring for Students with Disabilities [1]	
EDUC 739	Assessment and Individualized Educational Planning in Special and Inclusive Education [2]	
EDUC 740	Methods for Supporting Students in Special Education Using Intensive Interventions [2]	
EDUC 751A	Inclusive Elementary Education: Literacies and Learning for Diverse Learners	
EDUC 751B	Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	
EDUC 760	Introduction to Young Children with Special Needs	
EDUC 761	Designing Curriculum for Inclusive, Equitable Settings for Young Children (birth-8)	
Total Credits		**20**

1 EDUC 556 is a two (2) credit course. To reach the total credit requirement for the minor, this course may be repeated for a total of four (4) credits, or an additional elective course will be required.

2 Department permission required.

English (ENGL)

The English department offers majors in English; English literature; English teaching; English: text, business writing and digital studies; and interdepartmental programs in linguistics and journalism and media studies. We also offer the English/law 3+3 option for students interested in pursuing a JD after just 3 years of undergraduate study.

Though we offer several different programs in the English department, our shared focus is on studying the expressive possibilities of the

English language in its myriad forms. Our classes pursue three teaching missions. First, we train students in professional study of the English language. Second, we offer students ways of understanding the various traditions of works written in English, with emphasis upon close reading and placing works in historical and cultural contexts. Third, and particularly important, we teach students to write with clarity, persuasiveness and elegance, and for a variety of audiences and situations. In all of our undergraduate English majors, we provide our students with critical thinking, writing and research skills that will enrich their personal and professional lives.

Writing Programs

The Department of English offers courses for students interested in becoming writers. Writing workshops are offered in fiction, poetry and creative nonfiction. Intermediate-level courses may be taken more than once for credit, especially with two different instructors.

https://cola.unh.edu/english

Programs

- English Literature Major (B.A.) (p. 255)
- English Major (B.A.) (p. 257)
- English Major: Law 3+3 Option (B.A.) (p. 259)
- English Major: Text, Business Writing and Digital Studies Option (B.A.) (p. 262)
- English Teaching Major (B.A.) (p. 264)
- Journalism and Media Studies Major (B.A.) (p. 266)
- English Minor (p. 268)
- Writing Minor (p. 268)

Faculty

English Department Faculty

English Literature Major (B.A.)

https://www.unh.edu/program/bachelor-arts/english-literature

Description

The English literature major serves those students who want to focus particularly on the study of literature — its many forms and styles, its rich history and the range of approaches to its analysis. The English literature track is an especially attractive major for those who plan to go on to graduate school.

As an English literature major, a student will learn about various literary traditions, both British and American literature as well as traditions organized around other principles, such as post-colonial literature, women's literature, African-American literature and genres like poetry and drama. Courses are designed to expose students to many different sorts of works and to help them develop questions and strategies of critical thinking that will make all kinds of literary expression meaningful. And the works students will study will provide many ways of looking at the world and enrich their quality of life. What's more, students have many opportunities to hone critical writing and research skills and to practice the art of presenting research findings to a group, all skills in high demand in today's workplace. The English literature major is an excellent way to combine development of interpretive and writing skills with an exciting, in-depth encounter with some of the very best writing ever produced in the English language.

Students interested in majoring in English literature should contact the Department of English, 230F Hamilton Smith Hall, (603) 862-1313 or the director of the English literature program.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- The required minimum overall GPA in major coursework is 2.0.
- English Literature majors may use one major-required course to satisfy one Discovery category requirement.
- Majors may only count one online course toward their English major requirements.
- English literature majors complete a minimum of 40 credits of major coursework with a grade of C- or better.
- ENGL 401, ENGL 415, or ENGL 444 may not be used to satisfy major requirements.
- A minimum of six courses must be completed at the 600-level or higher.

Code	Title	Credits
Required Courses		
Coursework must meet the following distribution requirements (a single course may satisfy multiple requirements):		
ENGL 419	How to Read Anything [1]	
Select two 500-level literature courses (see list below)		
Select two Pre-1800 Literature courses (see list below)		
Select two Post-1800 Literature courses (see list below)		
ENGL 714	Critical Skills	
Select one American literature course at the 600/700 level		
Select one British literature course at the 600/700 level		
Select one course that studies Community and Cultures in a U.S. context (see list below)		
Select one course that investigates Anglophone literature in a global or transnational context (see list below)		
Select one course in a specific genre including, poetry, memoir, nonfiction, drama, fiction, and film (see list below) [2]		
Capstone:		
ENGL 787	English Major Seminar	

1 Must be completed with a minimum grade of C.
ENGL 419 is the only 400-level course that may count towards major requirements.

2 With the exception of ENGL 533 Introduction to Film Studies.

Code	Title	Credits
500-level Courses		
Select from the following:		
ENGL/LING 405	Introduction to Linguistics	
ENGL 501	Introduction to Creative Nonfiction	
ENGL 502	Professional and Technical Writing	
ENGL 503	Persuasive Writing	
ENGL 512	British Literature I Age of Heroes: Beowulf to Dr. Faustus	
ENGL 513W	British Literature II Age of Revolutions: Shakespeare to Austen	
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	
ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	
ENGL 518W	Bible as Literature	
ENGL 520	Dystopian and Post-Apocalyptic Fiction	
ENGL 526	Introduction to Fiction Writing	
ENGL 527	Introduction to Poetry Writing	
ENGL 533	Introduction to Film Studies	
ENGL 534	21st Century Journalism: How the News Works	
ENGL 550	Introduction to the Literature and Culture of Race	
ENGL 555	Science Fiction	
ENGL 575	Sex and Sensibility: The Rise of Chick Lit	
ENGL 581	Reading the Postcolonial Experience	
ENGL 585	Introduction to Women in Literature	
ENGL 595	Literary Topics	

Code	Title	Credits
Pre-1800 Literature Courses		
Select from the following:		
ENGL 512	British Literature I Age of Heroes: Beowulf to Dr. Faustus	
or ENGL 513W	British Literature II Age of Revolutions: Shakespeare to Austen	
ENGL 595	Literary Topics (if topic is appropriate)	
ENGL 657	Shakespeare	
ENGL 693R	Special Topics in Literature (if topic is appropriate)	
ENGL 751	Medieval Romance	
ENGL 756	Chaucer	
ENGL 758	Advanced Shakespeare	
ENGL 759	Milton	
ENGL 787	English Major Seminar (if topic is appropriate)	

Code	Title	Credits
Post-1800 Literature Courses		
Select from the following:		
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	
or ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	
ENGL 595	Literary Topics (if topic is appropriate)	
ENGL 690	African American Literature	
ENGL 693R	Special Topics in Literature (if topic is appropriate)	
ENGL 738	Asian American Studies	
ENGL 775	Modern Irish Literature: A Changing Landscape	
ENGL 777	The English Novel in the World	
ENGL 782	Modern and Contemporary Drama	
ENGL 784	English Novel of the 19th Century	
ENGL 787	English Major Seminar (if topic is appropriate)	
ENGL 797R	Special Studies in Literature (Race & Racial Theories) (if topic is appropriate)	

Code	Title	Credits
Community and Cultures in the U.S.		
Select from the following:		
ENGL 440A	Honors/On Race in Culture and Society	
ENGL 550	Introduction to the Literature and Culture of Race	
ENGL 650R	I Hear America Singing: Studying American Literature and Culture	
ENGL 690	African American Literature	
ENGL 693	Special Topics in Literature (subtopic R)	
ENGL 693R	Special Topics in Literature	
ENGL 738	Asian American Studies	
ENGL 778	Race and Gender in Film and Popular Culture	
ENGL 797R	Special Studies in Literature (Race & Racial Theories)	

Code	Title	Credits
Courses that Investigate Anglophone Literature in Global or Transnational Contexts		
Select from the following:		
ENGL 581	Reading the Postcolonial Experience	
ENGL 773	Literary Modernisms: Return, Revolt, Recycle	
ENGL 775	Modern Irish Literature: A Changing Landscape	
ENGL 777	The English Novel in the World	

Code	Title	Credits
Courses in a specific genre including poetry, memoir, nonfiction, drama, fiction, and film [2]		
Select from the following:		
ENGL 520	Dystopian and Post-Apocalyptic Fiction	
ENGL 555	Science Fiction	
ENGL 575	Sex and Sensibility: The Rise of Chick Lit	
ENGL 616A	Studies in Film/Genre	
ENGL 616B	Studies in Film/Authorship	
ENGL 616C	Studies in Film/Culture and Ideology	
ENGL 616D	Studies in Film/Narrative and Style	
ENGL 618	Film Theory	
ENGL 693R	Special Topics in Literature (if topic is appropriate)	
ENGL 778	Race and Gender in Film and Popular Culture	
ENGL 797R	Special Studies in Literature (Race & Racial Theories)	

Please see your advisor if you have questions about other courses that might fulfill these requirements.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing [1]	4
Language Course		4
Discovery Course		4
Discovery Course or Major Course		4
COLA 401A:First Year Seminar		1
	Credits	**17**
Spring		
ENGL 419	How to Read Anything	4
Language Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Second Year		
Fall		
Major 500-Level Literature Survey		4
Major Course 500/600-Level		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Major 500-Level Literature Survey		4
Major Course 500/600-Level		4
Discovery Course		4

Major/Minor/Discovery Course		4
	Credits	**16**
Third Year		
Fall		
ENGL 714	Critical Skills	4
Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Major Course		4
Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
ENGL 787	English Major Seminar (Capstone or Major Elective)	4
Major Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
ENGL 787	English Major Seminar (Capstone or Major Elective)	4
Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**129**

[1] Students who successfully apply AP or Transfer Credits towards the ENGL 401 'First Year Writing' requirement may enroll in ENGL 419 during their first semester.

Student Learning Outcomes

Program Learning Outcomes

All undergraduate English majors acquire the same core skills. These include:

- Proficiency in analytical writing, critical thinking, and public-speaking.
- Knowledge of important literary genres and subgenres
- Fluency in literary terminology,
- A broad understanding of British-and-American literature, from the medieval period in England and the moment of first contact in America to the present day.
- Demonstrated proficiency in writing an analytical essay that offers a sophisticated close-reading or explication of a literary text. This essay will have a clear thesis and proceed in a logical fashion, with interpretive claims supported by evidence from the text.
- Demonstrated proficiency in literary research and in writing an extended thesis-driven research paper in which sources are correctly and responsibly cited.
- Demonstrated understanding of how to read across the color line in the US and /or how to analyze literary works written in English from outside the UK and the US--from India, Africa, and the Caribbean, for example.

English Major (B.A.)

https://www.unh.edu/program/bachelor-arts/english

Description

Our general English major has two objectives: provide our students with a common core of literary experience and expertise, and offer them the opportunity to shape a course of study suited to their personal interests. By offering flexible requirements, we encourage students to devise a path through coursework that has an intelligent rationale. Students whose primary interest is in literary studies can focus on our many offerings in that area; those who have a special interest in writing can take multiple writing courses in fiction, creative nonfiction and poetry writing (in addition to literature courses). Alternatively, they can match up courses from different areas in the department (say, literature and writing courses focused on poetry). Our major requirements encourage students to sample a range of courses in literature, linguistics, creative or nonfiction writing, and English teaching, so that students become familiar with the various strands of inquiry that compose contemporary English studies. The guiding principle of the general English major, then, is that it is open and liberal by design. It allows students to sample a variety of courses in order to study the operation of language from many perspectives.

If you're interested in majoring in English please contact Carla Cannizzaro, Senior Academic Advisor, Department of English, 230F Hamilton Smith Hall, (603) 862-1313.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

1. Students must complete a minimum of 40 credits of with a minimum grade of C-.
2. The required minimum overall GPA is 2.0.
3. Only one online course may count toward major requirements.
4. Capstone must be completed with a minimum grade of C.

5. ENGL courses may not be double-counted across English major requirements.

Code	Title	Credits
Required Courses		
ENGL 419	How to Read Anything (Minimum grade of C)	4

Code	Title	Credits
Foundational Surveys		
Early Literature - Select one course from the following:		4
ENGL 512	British Literature I Age of Heroes: Beowulf to Dr. Faustus	
ENGL 513W	British Literature II Age of Revolutions: Shakespeare to Austen	
Modern Literature - Select one course from the following:		4
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	
ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	
ENGL 581	Reading the Postcolonial Experience	

Code	Title	Credits
A. Linguistics & Writing		
Select one course from the following:		4
ENGL 501	Introduction to Creative Nonfiction	
ENGL 502	Professional and Technical Writing	
ENGL 503	Persuasive Writing	
ENGL 526	Introduction to Fiction Writing	
ENGL 527	Introduction to Poetry Writing	
ENGL 534	21st Century Journalism: How the News Works	
ENGL 623	Creative Nonfiction	
ENGL 625	Intermediate Fiction Writing Workshop	
ENGL 625A	Intermediate Fiction Writing Workshop: Screenwriting	
ENGL 627	Intermediate Poetry Writing Workshop	
ENGL 701	Advanced Fiction Writing Workshop	
ENGL 703T	Travel Writing	
ENGL 752	History of the English Language	
ENGL 791	English Grammar	

Code	Title	Credits
B. Genres or Theory		
Select one course from the following:		4
ENGL 518W	Bible as Literature	
ENGL 520	Dystopian and Post-Apocalyptic Fiction	
ENGL 533	Introduction to Film Studies	
ENGL 555	Science Fiction	
ENGL 575	Sex and Sensibility: The Rise of Chick Lit	
ENGL 610W	Digital Humanities	
ENGL 616A	Studies in Film/Genre	
ENGL 616B	Studies in Film/Authorship	
ENGL 616C	Studies in Film/Culture and Ideology	
ENGL 616D	Studies in Film/Narrative and Style	
ENGL 618	Film Theory	
ENGL 655	Reading in all Directions: Comics and Graphic Narrative	
ENGL 714	Critical Skills	
ENGL 736	Environmental Theory	

Code	Title	Credits
C. Community and Cultures		
Select one course from the following:		4
ENGL 550	Introduction to the Literature and Culture of Race	
ENGL 690	African American Literature	
ENGL 738	Asian American Studies	
ENGL 778	Race and Gender in Film and Popular Culture	

Code	Title	Credits
D. Literature before 1800		
Select one course from the following:		4
ENGL 657	Shakespeare	
ENGL 751	Medieval Romance	
ENGL 758	Advanced Shakespeare	
ENGL 759	Milton	

Code	Title	Credits
E. Literature after 1800		
Select one course from the following:		4
ENGL 693	Special Topics in Literature	
ENGL 742	American Literature, 1815-1865	
ENGL 775	Modern Irish Literature: A Changing Landscape	
ENGL 777	The English Novel in the World	
ENGL 784	English Novel of the 19th Century	

Code	Title	Credits
Electives		
Select two additional ENGL courses at the 600 or 700 level.		8
Capstone		
ENGL 787	English Major Seminar	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing [1]	4
Language Course		4
Discovery Course		4
Discovery Course or Major Course		4
COLA 401A: First Year Seminar		1
	Credits	**17**
Spring		
ENGL 419	How to Read Anything	4
Language Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Second Year		
Fall		
Major: Foundational Literature Survey		4
Major Course 500/600-Level		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Major: Foundational Literature Survey		4
Major Course 500/600-Level		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Major Course		4
Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**

Spring		
Major Course		4
Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
ENGL 787	English Major Seminar (Capstone or Major Elective)	4
Major Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
ENGL 787	English Major Seminar (Capstone or Major Elective)	4
Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**129**

[1] Students who successfully apply AP or Transfer Credits towards the ENGL 401 'First Year Writing' requirement may enroll in ENGL 419 during their first semester.

Student Learning Outcomes

Program Learning Outcomes

All undergraduate English majors acquire the same core skills. These include:

- Proficiency in analytical writing, critical thinking, and public-speaking.
- Knowledge of important literary genres and subgenres
- Fluency in literary terminology,
- A broad understanding of British-and-American literature, from the medieval period in England and the moment of first contact in America to the present day.
- Demonstrated proficiency in writing an analytical essay that offers a sophisticated close-reading or explication of a literary text. This essay will have a clear thesis and proceed in a logical fashion, with interpretive claims supported by evidence from the text.
- Demonstrated proficiency in literary research and in writing an extended thesis-driven research paper in which sources are correctly and responsibly cited.
- Demonstrated understanding of how to read across the color line in the US and /or how to analyze literary works written in English from outside the UK and the US--from India, Africa, and the Caribbean, for example.

English Major: Law 3+3 Option (B.A.)

https://www.unh.edu/program/bachelor-arts/english-law-33

Description

The Law 3+3 program offers highly motivated UNH undergraduate students of English the possibility to earn both a bachelor's degree (B.A.) and a law degree (J.D.) in six, rather than seven, years of study. After completing three years as an undergraduate and gaining admission to the UNH Law School through the approved process, the 3+3 program participant will become a full-time first-year law student. Upon successful completion of the first year of law study, the credits earned will be counted toward the JD degree and as elective credits sufficient to complete UNH's requirements for the bachelor's degree.

Eligibility and Admission Process

STEP ONE: Application to the 3+3 English/Law B.A./JD option

Students apply to the program either when they submit their applications to UNH, selecting the English/J.D .option on the online application, *OR* after they are admitted to UNH, by applying directly to the English Department's "English/Law 3+3 Committee." In both cases, undergraduate applicants must fulfill the general requirements for admission to the English major.

Students applying at the time of admission to UNH will typically present the following high school credentials:

- A **3.5 GPA** in high school (UNH recalculates high school GPA's to a 4.0 weighted scale)
- A rigorous high school curriculum defined as the following:
  - 4 years of college prep (CP) or higher English
  - 4 years of CP or higher mathematics
  - 4 years of CP or higher social studies/history
  - Completed at least level 3 of a foreign language
  - 3 or more years of CP or higher laboratory sciences.
- A recommended score of **1200** or better (combined Math and Verbal) on the SAT or a **29** on the ACT.

Currently enrolled UNH students applying to the program must:

- Have a 3.5 GPA in college courses at the time of application. The English Department committee governing admission to the 3+3 program will also consider past SAT scores, maturity, and the ability to complete a highly demanding program of study based on performance thus far.
- For both groups, it is important to note that satisfying these requirements does not guarantee admission to this program. The review process is holistic (meaning all parts of the application carry weight and influence the final decision) and other components of the application will influence any admission decisions. Available space within the program will also influence who is admitted and how many students can be accepted.

STEP TWO: Application to UNH Law school

To be eligible, students must:

- Complete all Discovery and major requirements, and accrue at least 98 credits before beginning law school in their 4th/"1L" year of academic study.
- Maintain at least a 3.5 GPA (including transfer credits) at time of application to law school, and at the end of their Junior year.

- Take the LSAT or the GRE no later than December of the final undergraduate year (i.e. the Junior year). Students opting to take the LSAT must earn a score of **155 or above**. Students opting to take the GRE must score in the 80% of concurrently tested students.
- Submit the law school application through the Law School Admissions Council by March 15 of the calendar year in which the student wishes to enroll in law school.
- If, for some reason, students are not admitted to UNH Law, they will complete their final, fourth year at UNH, following the typical undergraduate program.

Questions about the English/Law 3+3 undergraduate program should be directed to Carla Cannizzaro, Senior Academic Advisor, Department of English, 230F Hamilton Smith Hall, (603) 862-1313.

Questions about UNH Law School entry should be directed to Kevin Sousa, UNH pre-law advisor, 110 Murkland Hall, (603) 862-2062.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Students in the English/law 3+3 option fulfill the BA degree requirements and English major. See the Degree Plan for the recommended path through the English major.

Participation requires that students:

- Complete all discovery and major requirements and **at least 98 credits** before beginning law school
- Maintain a **3.5 or above** grade point average, including transfer credits
- Take the LSAT or the GRE no later than December of the final undergraduate year (i.e. the Junior year). Students opting to take the LSAT must earn a score of **157 or above**. Students opting to take the GRE must score in the 80% of concurrently tested students.
- Submit the law school application through the Law School Admissions by January 1 of the year in which the student wishes to enroll in law school.

Major Requirements

1. Students must complete a minimum of 40 credits of with a minimum grade of C-.
2. The required minimum overall GPA is 2.0.
3. ENGL 401, ENGL 415, ENGL 444, ENGL 620 and ENGL 788 may not be used to satisfy major requirements.
4. A total of six courses must be at the 600-level or above.
5. One major-required course may be used to satisfy one Discovery category requirement.
6. Only one online course may count toward major requirements.
7. Special Topics in Literature courses (e.g. ENGL 693, ENGL 787, ENGL 797) may be used to satisfy Pre-1800 or Post-1800 and/or Community requirement areas if the designated topic is appropriate.
8. Capstone must be completed with a minimum grade of C. May not be double-counted toward major requirements. Submit a Capstone Declaration form indicating the English course to be taken at the time of registration.

Code	Title	Credits
Required Courses		
ENGL 419	How to Read Anything (Minimum grade of C)	4

Code	Title	Credits
500-level Courses		
Select two courses from the following:		
ENGL/LING 405	Introduction to Linguistics	
ENGL 501	Introduction to Creative Nonfiction	
ENGL 502	Professional and Technical Writing	
ENGL 503	Persuasive Writing	
ENGL 512	British Literature I Age of Heroes: Beowulf to Dr. Faustus	
ENGL 513W	British Literature II Age of Revolutions: Shakespeare to Austen	
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	
ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	
ENGL 518W	Bible as Literature	
ENGL 520	Dystopian and Post-Apocalyptic Fiction	
ENGL 526	Introduction to Fiction Writing	
ENGL 527	Introduction to Poetry Writing	
ENGL 533	Introduction to Film Studies	
ENGL 534	21st Century Journalism: How the News Works	
ENGL 550	Introduction to the Literature and Culture of Race	
ENGL 555	Science Fiction	
ENGL 575	Sex and Sensibility: The Rise of Chick Lit	
ENGL 581	Reading the Postcolonial Experience	
ENGL 585	Introduction to Women in Literature	
ENGL 595	Literary Topics	

Code	Title	Credits
Pre-1800 Literature Courses		
Select two courses from the following:		
ENGL 512	British Literature I Age of Heroes: Beowulf to Dr. Faustus	
or ENGL 513W	British Literature II Age of Revolutions: Shakespeare to Austen	
ENGL 595	Literary Topics (if topic is appropriate)	
ENGL 657	Shakespeare	
ENGL 693R	Special Topics in Literature (if topic is appropriate)	
ENGL 751	Medieval Romance	
ENGL 756	Chaucer	
ENGL 758	Advanced Shakespeare	
ENGL 759	Milton	
ENGL 787	English Major Seminar (if topic is appropriate)	

Code	Title	Credits
Post-1800 Literature Courses		
Select two courses from the following:		
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	
or ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	
ENGL 595	Literary Topics (if topic is appropriate)	
ENGL 690	African American Literature	
ENGL 693R	Special Topics in Literature (if topic is appropriate)	
ENGL 738	Asian American Studies	
ENGL 775	Modern Irish Literature: A Changing Landscape	
ENGL 777	The English Novel in the World	
ENGL 782	Modern and Contemporary Drama	
ENGL 784	English Novel of the 19th Century	
ENGL 787	English Major Seminar (if topic is appropriate)	
ENGL 797R	Special Studies in Literature (Race & Racial Theories) (if topic is appropriate)	

Code	Title	Credits
Community and Cultures Courses		
Select one course from the following:		
ENGL 440A	Honors/On Race in Culture and Society	
ENGL 550	Introduction to the Literature and Culture of Race	
ENGL 650R	I Hear America Singing: Studying American Literature and Culture	
ENGL 690	African American Literature	
ENGL 693	Special Topics in Literature (subtopic R)	
ENGL 693R	Special Topics in Literature	
ENGL 738	Asian American Studies	
ENGL 778	Race and Gender in Film and Popular Culture	
ENGL 797R	Special Studies in Literature (Race & Racial Theories)	

Code	Title	Credits
Select one additional 500-, 600-, or 700- level ENGL course		4
Capstone (one 700-level ENGL course)		4

Please see your advisor if you have questions about other courses that might fulfill these requirements.

Juris Doctor Requirements

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Spring		**Credits**
Discovery Course		4
Discovery Course		4
ENGL 500-level Course (512, 513 count as pre-1800 lit courses; 514, 516 are post-1800 lit.)		4
Select one of the following:		
ENGL 512	British Literature I Age of Heroes: Beowulf to Dr. Faustus	
ENGL 513W	British Literature II Age of Revolutions: Shakespeare to Austen	
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	
ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	
Foreign Language or Elective (if FL is completed in one semester)		4
	Credits	**16**
Fall		
ENGL 401	First-Year Writing	4
Discovery Course		4
ENGL 419	How to Read Anything	4
Foreign Language Course		4
	Credits	**16**
Second Year		
Spring		
Discovery Course		4
Discovery Course		4
ENGL 600-700 Pre-1800 Literature Course (such a Shakespeare, Chaucer, Literature of Early America)		4
ENGL 600-700 Post-1800 Literature Course (such as Victorian Novel, Contemporary American Literature, Postcolonial Literature)		4
LAW 475	Getting Ready to Succeed in Law School (If not previously taken.)	2
	Credits	**18**
Fall		
Discovery Course		4
Discovery Course		4
ENGL 500-level Course (512, 513 count as pre-1800 lit courses; 514, 516 are post-1800 lit.)		4
Select one of the following:		
ENGL 512	British Literature I Age of Heroes: Beowulf to Dr. Faustus	
ENGL 513W	British Literature II Age of Revolutions: Shakespeare to Austen	
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	
ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	
Any 500-700 Level ENGL Course		4
LAW 475	Getting Ready to Succeed in Law School (Option: can instead be taken in second year spring or third year fall.)	2
	Credits	**18**
Third Year		
Spring		
ENGL 600-700 Community and Cultures Course Requirement		4
ENGL 600-700-level Elective Course		4
ENGL 787	English Major Seminar	4
Elective Course		4
	Credits	**16**
Fall		
Discovery Course		4
Discovery Course		4
ENGL 600-700 Pre-1800 Literature Course (if you took 512 or 513, this can be any 600-700-level ENGL course.)		4
ENGL 600-700 Post-1800 Literature Course (If you took 514, 515, or 516, this can be any 600-700-level ENGL course.)		4
LAW 475	Getting Ready to Succeed in Law School (If not previously taken.)	2
	Credits	**18**
	Total Credits	**102**

TOTAL: 98 Credits (40 Discovery, 44 English, 4-8 Foreign Language, 4-8 Elective)

NEED: Beyond ENGL 401 First-Year Writing, 3 more WI courses, one in major, one at 600 level.

Students should take LAW 475 Getting Ready to Succeed in Law School at some point during their Sophomore year but no later than the first semester of their Junior year. This 2-credit course, taught by a UNH Law School faculty member, will teach students how to prepare for a legal education. If LAW 475 is not offered during the appropriate

timeline for student progression to their "1L"/Senior year of study, other 2-credit options that are suitable preparation for law school study include JUST 550 Mock Trial and JUST 551 Mock Trial. For other possible 1-2 credit courses, see the Time & Room Schedule and consult with your academic advisor. The 1-2 credit courses can be completed at any point in your first 3 years at UNH-Durham. You can also complete them during the January term [see, e.g., THDA 531 The London Experience: Discovery, a 2-credit study abroad program] or in the summer.

HONORS: It is not necessary to complete the honors program, but it is possible: Honors in Discovery + Honors in Major with Thesis (See addendum I) .

SEQUENCE: With the exception of ENGL 419 and ENGL 787, English courses don't need to be taken in any specific order; the guide above is only a suggestion. In general, 500-level courses should be taken before 600-700 level ones. However, a student could take a class that satisfies the Race Requirement in Semester I of Junior year rather than Semester II, or a pre-1800 600-700 level literature course in Semester II of Junior year. As long as all the categories listed above are met, students have the flexibility to choose the courses that best meet their interests and schedules. There are some writing and journalism courses that have prerequisites, and students should be careful to note these before choosing upper-level courses in those fields.

ADVISING: It is very important that students progressing through the 3+3 English/Law program maintain close contact with their degree advisor. This will help students remain "on track" to complete degree requirements, and the advisor will guide the student into the next phase of the program, admission to the Law school. Students who **plan early and work closely** with their advisor may find it possible to include study abroad and participation in other University programs, if desired, but only with careful planning.

Law School Degree Plan

This is a sample Law School course planning outline. Variations to this suggested path of courses may be undertaken with the approval of the student's Law school advisor.

Senior/First Year Law (31 credits)

The schedule and track of the second and third years of law school are directed by each student with careful advising from the law faculty.

Student Learning Outcomes

Program Learning Outcomes

- Proficiency in analytical writing, critical thinking, and public-speaking.
- Knowledge of important literary genres and subgenres.
- Fluency in literary terminology.
- A broad understanding of British-and-American literature, from the medieval period in England and the moment of first contact in America to the present day.
- Demonstrated proficiency in writing an analytical essay that offers a sophisticated close-reading or explication of a literary text. This essay will have a clear thesis and proceed in a logical fashion, with interpretive claims supported by evidence from the text.
- Demonstrated proficiency in literary research and in writing an extended thesis-driven research paper in which sources are correctly and responsibly cited.
- Demonstrated understanding of how to read across the color line in the US and /or how to analyze literary works written in English from outside the UK and the US--from India, Africa, and the Caribbean, for example.

English Major: Text, Business Writing and Digital Studies Option (B.A.)

https://www.unh.edu/program/bachelor-arts/english-text-business-writing-digital-studies

Description

The modern workplace requires that employees be adaptable. The Bureau of Labor Statistics conducted a long-term study that showed people held 11.7 jobs between the ages of 18 and 48, and those numbers are increasing with people moving between jobs more frequently every year. It is crucial that we prepare our students not just for one industry, but rather arm them with the transferable skills of critical reading, writing, analysis, production, theory and aesthetics of new forms in digital media and business. Students will leave this major option with the skills that are in the highest demand in all fields today.

This major option addresses the growing demand for graduates who are well-versed in a combination of humanistic and digital skills and able to work in a variety of professional environments. In particular, graduates of this option will be prepared for careers at cultural and historical institutions, as well as in emerging job markets of information management and online content delivery. This specialization complements areas requirements for the English major but it is not limited to English majors. Double majors are encouraged. Small classes, a great sense of community and a diversity of faculty specializations create an atmosphere that propels students toward success. Students will receive real-life work experience through our internship class, and they will also leave this major with a digital portfolio that contains a collection of professional projects that can be used on the job market.

In this English major option, students are trained in the critical reading, analysis, production, theory and aesthetics of new forms in media and business. These forms include but are not limited to social media, business writing conventions, modes of digital storytelling (i.e. audio and video essays, podcasts and wikis), digital archives, web design, and online communities and interaction. Students are also trained in analysis through traditional humanistic literature and they are expected to fulfill the core learning objectives shared by *all English major tracks*. These include:

- the ability to communicate and debate effectively with others, both orally and in writing,
- the ability to closely examine a variety of texts (including modern digital artifacts and archival materials)
- developing the ability to use a variety of media and communication platforms;
- experience and practice in dynamic critical thinking and creativity

If you're interested in majoring in English: Text, Business Writing and Digital Studies please contact Carla Cannizzaro, Senior Academic Advisor, Department of English, 230F Hamilton Smith Hall, (603) 862-1313.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Eleven courses (44 credits) are required for the major.
- Courses must be completed with a minimum grade of C- or better.
- Majors may only count one online course towards their major requirements.
- ENGL 403, ENGL 415 and ENGL 444 courses may not be used to satisfy major requirements.
- English majors may use one major-required course to satisfy one Discovery category requirement.
- Students must meet the following distribution requirements below. Note that any one course may satisfy more than one requirement.

Code	Title	Credits
Required Courses		
ENGL 419	How to Read Anything [1]	4
One 500-level Introductory Course. Select from the following:		4
ENGL 501	Introduction to Creative Nonfiction (Digital Essay version)	
ENGL 502	Professional and Technical Writing	
ENGL 503	Persuasive Writing (Text, Business Writing, Digital version)	
ENGL 510		
ENGL 602	Advanced Professional and Technical Writing	
Select three ENGL courses numbered 600 or above [2]		12
Select two pre-1800 literature courses (select from the list below)		8
Select two post-1800 literature courses (select from the list below)		8
Select one course that addresses race, the construction of race, and racial theories (select from the list below)		4
Capstone [3]		
ENGL 796	The Internship Experience	4
Digital Portfolio		

1 Must be completed with a minimum grade of "C" to count towards the major.

2 Students may include any advanced-level ENGL courses in which **20% of student assessment/work includes a digital humanities, digital research, or digital production component** (even it taken to fulfill literature requirements). *ENGL 602 may NOT be double counted for this requirement. Look for the 'DH' designation in the course descriptions during registration.*

3 **The Internship Experience:** Experiential learning course that allows students to apply all of the writing, speaking, and critical thinking skills into an on-the-job experience, enabling them first-hand practice with writing documents at work, peer collaboration, public speaking opportunities/presentations, and supervision and evaluation. Students must have JR or SR status to enroll in this course.
Digital Portfolio: A minimum of six polished projects represented in a digital portfolio started in ENGL 602 and expanded over your career at UNH. A reflective essay will accompany this portfolio. This is a non-credit degree requirement. The Digital Portfolio is completed during enrollment in ENGL 796 'The Internship Experience'.

Code	Title	Credits
Pre-1800 Literature Courses		
Select from the following:		
ENGL 512	British Literature I Age of Heroes: Beowulf to Dr. Faustus	
or ENGL 513W	British Literature II Age of Revolutions: Shakespeare to Austen	
ENGL 595	Literary Topics (if topic is appropriate)	
ENGL 657	Shakespeare	
ENGL 693R	Special Topics in Literature (if topic is appropriate)	
ENGL 751	Medieval Romance	
ENGL 756	Chaucer	
ENGL 758	Advanced Shakespeare	
ENGL 759	Milton	
ENGL 787	English Major Seminar (if topic is appropriate)	

Code	Title	Credits
Post-1800 Literature Courses		
Select from the following:		
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	
or ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	
ENGL 595	Literary Topics (if topic is appropriate)	
ENGL 690	African American Literature	
ENGL 693R	Special Topics in Literature (if topic is appropriate)	
ENGL 738	Asian American Studies	
ENGL 775	Modern Irish Literature: A Changing Landscape	
ENGL 777	The English Novel in the World	
ENGL 782	Modern and Contemporary Drama	
ENGL 784	English Novel of the 19th Century	
ENGL 787	English Major Seminar (if topic is appropriate)	
ENGL 797R	Special Studies in Literature (Race & Racial Theories) (if topic is appropriate)	

Code	Title	Credits
Race, the Construction of Race, and Racial Theory Courses		
Select from the following:		
ENGL 440A	Honors/On Race in Culture and Society	
ENGL 550	Introduction to the Literature and Culture of Race	
ENGL 650R	I Hear America Singing: Studying American Literature and Culture	
ENGL 690	African American Literature	
ENGL 693	Special Topics in Literature (subtopic R)	
ENGL 693R	Special Topics in Literature	
ENGL 738	Asian American Studies	
ENGL 778	Race and Gender in Film and Popular Culture	
ENGL 797R	Special Studies in Literature (Race & Racial Theories)	

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing [1]	4
Language Course		4
Discovery Course		4
Discovery Course or Major Course		4
COLA 401	Liberal Arts Advising Seminar	1
	Credits	**17**

Spring		
ENGL 419	How to Read Anything	4
Language Course		4
Discovery Course		4
Major Elective Course or (ENGL 501, ENGL 502 or ENGL 503)		4
	Credits	**16**
Second Year		
Fall		
Major Elective Course or (ENGL 501, ENGL 502 or ENGL 503)		4
ENGL 510 or ENGL 602	or Advanced Professional and Technical Writing	4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
ENGL 510 or ENGL 602	or Advanced Professional and Technical Writing	4
Major Elective Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Major Elective Course		4
Major Elective Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Major Elective Course		4
Major Elective Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
ENGL 796	The Internship Experience (or Major Elective Course)	4
Major Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
ENGL 796	The Internship Experience (or Major Elective Course)	4
Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**129**

[1] Students who successfully apply AP or Transfer Credits towards the ENGL 401 First-Year Writing requirement may enroll in ENGL 419 How to Read Anything during their first semester.

Student Learning Outcomes

Program Learning Outcomes

All undergraduate English majors acquire the same core skills. These include:

- Proficiency in analytical writing, critical thinking, and public-speaking.
- Knowledge of important literary genres and subgenres
- Fluency in literary terminology,
- A broad understanding of British-and-American literature, from the medieval period in England and the moment of first contact in America to the present day.
- Demonstrated proficiency in writing an analytical essay that offers a sophisticated close-reading or explication of a literary text. This essay will have a clear thesis and proceed in a logical fashion, with interpretive claims supported by evidence from the text.
- Demonstrated proficiency in literary research and in writing an extended thesis-driven research paper in which sources are correctly and responsibly cited.
- Demonstrated understanding of how to read across the color line in the US and /or how to analyze literary works written in English from outside the UK and the US--from India, Africa, and the Caribbean, for example.

English Teaching Major (B.A.)

https://www.unh.edu/program/bachelor-arts/english-teaching

Description

Are you passionate about serving your community? Do you enjoy reading, writing, creative thinking and imagination? Are you eager to shape the future? The English teaching major could be a wonderful choice for you!

English teaching majors synthesize knowledge across areas — literature, language, composition, speaking, listening, identity, linguistics and education, just to name a few. We think critically and collaborate. We spark learning and we study it. We evaluate texts and resources, examine literacy skills, consider appropriate media, and design reading and writing opportunities and instruction in a variety of contexts. In particular, the English teaching major focuses on preparing future teachers and educational leaders, but the skills students learn are valuable in many settings, from the classroom to the workplace to the broader world.

The goal of the English teaching major is to prepare informed, thoughtful, and skilled English teachers who will become educational leaders in their own communities and in the teaching profession. In the English Department, students learn about literature, cultural theories of race and identity, composition, grammar, a variety of textual and digital media, and instructional practices appropriate to grades five through twelve. In the Education Department, students learn about human development, the history of schooling, and many philosophical perspectives on learning and education.

The final steps to becoming a teacher are completing a Master's program in the Education Department and applying for New Hampshire teacher certification. Students who choose one of these programs will complete graduate-level coursework and undertake a year-long teaching internship where they will collaborate with a teacher to apply their knowledge in a classroom. Students who complete this program are uniquely well prepared to become leaders in the profession over the long term. State certification is transferable to most other states, and, after five years, 88.7% of UNH master's program graduates report that they are teaching or employed in an education-related job. Join the English teaching major and turn your passion for English into a fulfilling career serving your community!

Students interested in majoring in English teaching should consult Carla Cannizzaro, Senior Academic Advisor, Department of English, 230F Hamilton Smith Hall, (603) 862-1313, or the director of the English teaching program, Prof. Alecia Magnifico.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Completion of the undergraduate teaching major does not in itself meet state certification requirements.
- Students should enroll in the undergraduate major and pass the following courses with a GPA of 2.5 or better.
- English teaching majors may use one major-required course to satisfy one Discovery category requirement.
- Majors may only count one online course towards the English major requirements.

Code	Title	Credits
Required Courses		
ENGL 419	How to Read Anything	4
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	4
ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	4
ENGL 657	Shakespeare	4
ENGL 725 & ENGL 726	Teaching Writing: Seminar in English Teaching and Teaching Literature and Literacy: Seminar in English Teaching	8
or ENGL 710 & ENGL 792	Teaching Writing and Teaching Literature and Literacy	
ENGL 791	English Grammar	4
EDUC 500	Exploring Teaching	4
Select two additional literature courses at the 600-level or above. [1]		8
Select one course from the Community and Cultures list below. [2]		4
Select one additional ENGL Department course in writing, linguistics, critical theory, film, or literature. [3]		4
Capstone		
ENGL 789	Special Topics in English Teaching	4
Total Credits		**52**

Code	Title	Credits
Community and Cultures Courses		
Select from the following:		
ENGL 440A	Honors/On Race in Culture and Society	
ENGL 550	Introduction to the Literature and Culture of Race	
ENGL 650R	I Hear America Singing: Studying American Literature and Culture	
ENGL 693	Special Topics in Literature (subtopic R)	
ENGL 693R	Special Topics in Literature	
ENGL 738	Asian American Studies	
ENGL 778	Race and Gender in Film and Popular Culture	
ENGL 797R	Special Studies in Literature (Race & Racial Theories)	

1. ENGL 512 or ENGL 513W may be substituted for one of the two required literature courses numbered 600 or above.
2. Other relevant courses may count with prior written approval of the student's advisor. The course used to fulfill this requirement may be double counted within the 'Two literature courses 600 or above' OR 'Additional ENGL Department course…' requirement area.
3. ENGL 401, ENGL 415, and ENGL 444 may not be used to fulfill this requirement.

Additional Information

English teaching majors should apply for the fifth-year teaching internship and master's degree program by fall or spring of the senior year (usually September 30 for the internship and November 1 or February 1 for the master's program). Students with a GPA of 3.2 or better can apply for the master's degree program in their junior year. If accepted early, the student can earn graduate credit for up to three undergraduate English or education courses.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing [1]	4
Language Course		4
Discovery Course		4
Discovery Course or Major Course		4
COLA 401A: First Year Seminar		1
	Credits	**17**
Spring		
ENGL 419	How to Read Anything	4
Language Course		4
Discovery Course		4
Major Elective Course		4
	Credits	**16**
Second Year		
Fall		
Major Elective Course		4
Major Elective Course		4
Discovery Course		4

EDUC 500	Exploring Teaching (or Major/Minor/ Discovery Course)	4
	Credits	**16**
Spring		
Major Elective Course		4
Major Elective Course		4
Discovery Course		4
EDUC 500	Exploring Teaching (or Major/Minor/ Discovery Course)	4
	Credits	**16**
Third Year		
Fall		
ENGL 725	Teaching Writing: Seminar in English Teaching	4
ENGL 791	English Grammar (or Major Elective Course)	4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
ENGL 726	Teaching Literature and Literacy: Seminar in English Teaching (or Major Elective Course)	4
ENGL 791	English Grammar (or Major Elective Course)	4
Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
ENGL 789	Special Topics in English Teaching (Capstone or Major Elective Course)	4
Major Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
ENGL 789	Special Topics in English Teaching (Capstone or Major Elective Course)	4
Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**129**

[1] Students who successfully apply AP or Transfer Credits towards the ENGL 401 'First Year Writing' requirement may enroll in ENGL 419 during their first semester.

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to compare philosophies of English teaching and learning, and to develop their own approaches to writing and literacy instruction in unit plans and lesson plans. In class, we will discuss theoretical and pedagogical ideas centered on student writing, engage in reading and writing exercises, produce and practice instructional activities and assessments, evaluate approaches to teaching writing, and review state-level standards and tests. Overall, the aim of the course is recognition of literacy skills (including reading, writing, listening, speaking, and viewing) and consideration of how they can be used for learning goals including comprehension, analysis, description, and evaluation.

Students will:

- Design activities, lessons, and units to meet established standards and objectives in writing and language use.
- Adapt materials for a variety of students' needs, including exceptional learners.
- Identify teaching resources among mentors, professional literature, conferences, organizations (e.g., National Council of Teachers of English [NCTE]), technology, and websites.
- Reflect and write on the theoretical bases for instructional decisions, evaluating professional literature and using appropriate academic conventions.
- Deliver engaging, on-point writing and language instruction appropriate to audience and content; practice a variety of presentation and discussion strategies.

Journalism and Media Studies Major (B.A.)

https://www.unh.edu/program/bachelor-arts/journalism-media-studies

Description

Journalism is a rapidly changing discipline that remains crucial in how we negotiate and engage with civic life. This program will provide students with the practical skills journalism demands as well as the theoretical and analytic training to navigate an evolving media landscape in thoughtful and ethical ways. The Journalism and Media Studies major offers a wide variety of courses, introducing students to interviewing, reporting, editing, narrative storytelling, and media production (the "how" of the craft of journalism) as well the rhetoric, evolution, and impact of the media and digital humanities (the "why" of journalism's mission and role in our culture). Together, these practical skills and theoretical perspectives will prepare students for an expansive range of professional opportunities including media writing, editing, and production, and private/public communication; and will help them learn to engage with a complex information environment in whatever field they pursue.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Core Courses		
CMN 455	Introduction to Media Studies	4
or CMN 456	Propaganda and Persuasion	
ENGL 621	Newswriting	4
ENGL 721	Advanced Reporting	4
Reporting and Production		
Select three courses from the following:		12
ENGL 501	Introduction to Creative Nonfiction	
ENGL 623	Creative Nonfiction	
ENGL 703T	Travel Writing [1]	
ENGL 711	Editing	
ENGL 712	Multimedia Storytelling	
ENGL 722	Feature Writing	
CMN 696W	Seminar in Media Studies	
CMN 740	Seminar in Communication Research and Theory	
CMN 772	Seminar in Media Theory	
Analysis of Journalism and Media		
Select two courses from the following:		8
CMN 535	Digital Democracies	
CMN 596	Special Topics in Media Studies	
CMN 620W	Global Media, Culture, and Power	
CMN 622	Digital Rhetoric	
CMN 634	Media and Politics	
CMN 650W	Critical Perspectives on Film	
CMN 703	Seminar in Rhetorical Theory	
CMN 772	Seminar in Media Theory	
ENGL 610W	Digital Humanities	
Practicum		
Select 4-credits (1-2 courses) from the following:		4
CMN 599	Internship (Media Practices)	
CMN 675	Civil Discourse Lab: Public Dialogue, Equity, & Authenticity	
CMN 676	Civil Discourse Lab: Public Deliberation and Issue Framing	
ENGL 610W	Digital Humanities	
ENGL 693	Special Topics in Literature	
ENGL 703T	Travel Writing [1]	
ENGL 720	Journalism Internship	
Capstone		
CMN 772	Seminar in Media Theory (Digital Newsroom)	4
Total Credits		**40**

[1] ENGL 703T Travel Writing can either be used to fulfill the Reporting and Production or Practicum requirement, not both.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
CMN 455 or CMN 456	Introduction to Media Studies or Propaganda and Persuasion	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
ENGL 621	Newswriting	4
CMN 596	Special Topics in Media Studies	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
ENGL 721	Advanced Reporting	4
CMN 696W	Seminar in Media Studies	4
Discovery Course		4
Foreign Language		4
	Credits	**16**
Spring		
ENGL 501	Introduction to Creative Nonfiction	4
CMN 634	Media and Politics	4
Discovery Course		4
Foreign Language		4
	Credits	**16**
Third Year		
Fall		
CMN 772	Seminar in Media Theory	4
CMN 620W	Global Media, Culture, and Power	4
ENGL 712	Multimedia Storytelling	4
Discovery Course		4
	Credits	**16**
Spring		
ENGL 720 or CMN 599	Journalism Internship or Internship	1
Discovery Course		4
Elective Course		4
Elective Course		4
	Credits	**13**
Fourth Year		
Fall		
Semester Abroad		
Discovery Course		4
	Credits	**4**
Spring		
CMN 772	Seminar in Media Theory	4
ENGL 711	Editing	4
Discovery Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**113**

Student Learning Outcomes

Program Learning Outcomes

Strengthen Writing & Storytelling Skills

- Reporting, writing, editing, and storytelling skills necessary for a successful career in journalism and related professions.

Develop Strong Analytical Skills

- Media literacy skills required to navigate, and innovate in our evolving media ecosystem.

Understand Historical Context

- An ethically and historically grounded understanding of mass media systems, with special attention to the integrity of civil discourse in the context of disinformation, AI, and other emerging challenges.

English Minor

https://www.unh.edu/program/minor/english

Description

The English minor offers students the opportunity to develop critical thinking, writing and research skills that will enrich both their personal lives and their professional careers. Students draw upon courses in literature, creative writing, journalism and linguistics to craft their own course of study.

Students interested in minoring in English may contact Carla Cannizzaro, Senior Academic Advisor, Department of English, 230F Hamilton Smith Hall, (603) 862-1313 with any questions.

Requirements

Academic policies related to Minors.

The minor in English consists of completing five courses (20 credits) with a minimum grade of C- or better.

Code	Title	Credits
Required course		
ENGL 419	How to Read Anything	4
Electives [1]		16
Total Credits		**20**

[1] Elective courses: at least three courses at the 600 level or above.

ENGL 401 First-Year Writing, ENGL 415 and ENGL 444 cannot be applied toward the minor.

Writing Minor

https://www.unh.edu/program/minor/writing

Description

With employers stressing the importance of writing skills and the writing demands of all professions increasing, the writing minor is designed to serve students who want to demonstrate sustained work with writing. Students take a concentration of courses in creative writing or journalism, focusing on the creative and practical uses of writing. The completion of a writing minor will enhance the job prospects in fields where the demands for writing is higher than ever. The writing minor also serves students who want to use the imagination to develop stories, poems, essays and screenplays.

Students interested in minoring in English writing may contact Carla Cannizzaro, Senior Academic Advisor, Department of English, 230F Hamilton Smith Hall, (603) 862-1313 with any questions.

Requirements

Academic policies related to Minors.

- Students must complete at least five 4-credit courses (20 credits).
- ENGL 415s, "Literature and...," courses cannot be applied toward the English writing minor.
- The minimum acceptable grade for each course is C-.
- No more than two transfer courses can be applied toward the English writing minor.
- English literature and English teaching majors may declare a writing minor with the approval of their faculty advisor.
- A maximum of two English courses (8 credits) are allowed to double-count toward the literature or teaching major and writing minor.
- Other English Department majors are not eligible to declare a writing minor.

Code	Title	Credits
Requirements		
Writing Minor - Approved Courses		
Select five courses from the following:		20
(A minimum of three courses selected must be at the 600-level or higher.)		
ENGL 419	How to Read Anything	
ENGL 501	Introduction to Creative Nonfiction	
ENGL 502	Professional and Technical Writing	
ENGL 503	Persuasive Writing	
ENGL 526	Introduction to Fiction Writing	
ENGL 527	Introduction to Poetry Writing	
ENGL 602	Advanced Professional and Technical Writing	
ENGL 621	Newswriting	
ENGL 623	Creative Nonfiction	
ENGL 625	Intermediate Fiction Writing Workshop	
ENGL 625A	Intermediate Fiction Writing Workshop: Screenwriting	
ENGL 627	Intermediate Poetry Writing Workshop	
ENGL 631	Digital Reporting	
ENGL 694	Special Topics in Creative Writing	
ENGL 701	Advanced Fiction Writing Workshop	
ENGL 703T	Travel Writing	
ENGL 710	Teaching Writing	
ENGL 711	Editing	
ENGL 712	Multimedia Storytelling	
ENGL 721	Advanced Reporting	
ENGL 722	Feature Writing	
ENGL 791	English Grammar	
Total Credits		**20**

French (FREN)

Overview

French is a global language of culture, diplomacy, and intellectual exchange, spoken by more than 300 million people across five continents. As one of the official languages of major international organizations —including the United Nations, the European Union, the International

Olympic Committee, and the International Red Cross—French plays a central role in global governance and international relations. In an increasingly interconnected world, proficiency in French provides students with both cultural depth and practical advantages in fields such as business, law, public health, education, and the arts.

Study Abroad

The French major offers students the opportunity to earn UNH credit through approved study abroad programs in France and throughout the Francophone world. Students may choose from four or eight-week summer programs, semester-long study, or a full academic year at accredited universities in cities such as Paris, Lyon, Aix-en-Provence, Nice, Pau, Lille, Geneva, Brussels. Some programs don't require any knowledge of French and can be used to satisfy the language requirement. For more information, students should consult the French program coordinator or the advisors at the UNH Global Education Center. Financial aid applies to all approved programs, making international study accessible and enriching for French majors and minors.

Teaching Assistantship in France (TAPIF)

Each year the French government offers teaching assistantships in French elementary or secondary schools for graduating students who have studied French. The application process begins during the fall semester of the senior year. Consultation with the advisor is recommended.

https://cola.unh.edu/languages-literatures-cultures

Programs

- French Major (B.A.) (p. 269)
- French Minor (p. 271)

Faculty

Languages, Literatures, and Cultures Department Faculty

French Major (B.A.)

https://www.unh.edu/program/bachelor-arts/french

Description

The undergraduate major in French offered by the Department of Languages, Literatures and Cultures is centered on the study of the French language and the literatures and cultures of France and the French-speaking world. Students who complete the requirements for the major can expect to become proficient in French at a level that would allow them to communicate with native speakers, to develop an in-depth critical appreciation of French and Francophone cultures and literatures, and to be culturally sensitive members of society.

The program offers courses devoted to authors, works, and literary and cultural movements that span ten centuries and four continents. The curriculum also includes interdisciplinary courses on relations between literature and other areas of study such as history, law, religion, politics and the arts. All courses are conducted in French, and majors are expected to write papers and examinations in that language.

French can be taken either as a primary major or as one of two majors, in consultation with the director of undergraduate studies. Appropriate majors to combine with French might include, but are not limited to, international affairs, political science, English, education, film and media studies, history, music, philosophy, theater studies, women's studies, business and communication.

The French major may interest students desiring a general humanistic education based on the language and literature of the French-speaking world; students planning to teach French at the elementary or secondary level; students who intend to pursue graduate work in preparation for teaching and research at the college level; and students preparing for careers in such areas as international law, business, journalism, international organizations, and public or government service, which require both training in a major foreign language and/or a general background in a humanistic discipline.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The required minimum overall GPA in major coursework is 2.0.

All students must complete at least 10 classes (40 credits). All coursework required for the French major must be completed with a grade of C or better. Specific course requirements are:

Code	Title	Credits
Language courses [1]		
Students entering major at a higher language level will replace the language courses with additional electives		
FREN 503	Intermediate French I	
FREN 504	Intermediate French II	
FREN 631	Advanced French: Reading and Writing	
FREN 632	Advanced French: Listening and Speaking	
Electives [2]		
Select a minimum of five courses from the following Culture, Linguistics, and Literature category		
FREN 525	A Road Trip Through France: Baguette, Brie, Bordeaux, and Beyond	
FREN 651	Love, War, and Power in French Literature	
FREN 595	French Practicum	
FREN 652	Greatest Hits of French	
FREN 676	Topics in Francophone Culture	
FREN 775	Les Mis and their World	
FREN 795	Special Studies in French Language and Literature	
LLC 540	Film History	
LLC 552	Comparative Literature: Masterpieces of World Literature II	
LLC 595	Language Practicum	
LLC 791	Methods of Foreign Language Teaching	
Capstone: [3]		
LLC 790	World Languages Capstone	
Study Abroad		

An approved foreign study experience in a French-speaking country is required, although an approved equivalent high-impact experience may be substituted for study abroad with a compelling justification

[1] While the major may start counting as early as the Intermediate I level (FREN 503), those who enter the major at a higher level (FREN 504, FREN 631, or FREN 632) will replace the courses they skip from the four in the intermediate and advanced language category with additional electives in the Culture, Linguistics, and Literature category.

[2] More electives required if fewer language credits were completed due to proficiency level and placement.
No limit on the number of classes in English allowed. Students taking no classes in the target language in a given semester will be strongly encouraged to enroll in one credit of conversation hour to maintain their language skills, and many of the courses taught in English will allow students the option to (or even require students to) do some work in the target language.

[3] Or approved equivalent 700-level course taken at UNH, approved study abroad equivalent, or approved high-impact experience (such as internship with a robust target language/culture component).

Transfer students must earn a minimum of 12 major credits at the Durham campus.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

French majors may use two major-required courses to satisfy two Discovery category requirements.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
Language Major Course		4
Discovery Course		4
Discovery Course		4
First Year Seminar		1
	Credits	**17**
Spring		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Second Year		
Fall		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Study Abroad (summer and year-long abroad is also available)		16
	Credits	**16**
Fourth Year		
Fall		
Language Major Capstone Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Language Major Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

Upon completion of the French Major, our students are expected to master:

- Communicative Proficiency: Students communicate in the target language, having mastered the four basic communicative skills at the advanced level according to the ACTFL Proficiency Guidelines. They are able to narrate and describe in past, present and future time, use a variety of communication strategies (such as circumlocution, paraphrasing), support their opinions and hypothesize. They can be understood without difficulty by a native interlocutor and carry conversations on a wide variety of topics. They are able to understand native speakers in a variety of situations (academic, everyday life, radio, television).
- Intercultural Competence: During and after their experiences abroad, students are led to reflect on cultural differences and develop cross-cultural competencies. They develop awareness of what it means to interact appropriately and effectively within diverse social and cultural contexts.

- Knowledge and Understanding: Students grasp complex or unfamiliar texts (literary, journalistic, etc.), have an awareness of the esthetic properties of language and literary style, and have developed tools to asses and analyze different linguistic registers. They are able to contextualize and have knowledge of a representative selection of figures, works, and tendencies in the literature and other cultural productions from the Francophone world.
- Critical Thinking: Students are able to critically analyze texts and other cultural artifacts from various areas of the Francophone world, are able to define a position about them, and to substantiate it using research. They are able to establish connections between different areas of knowledge, and are able to collaborate to answer questions and solve problems through task-based activities.

French Minor

https://www.unh.edu/program/minor/french

Description

The minor in French provides students with the components of a well-rounded education: a solid understanding of grammar and pronunciation, intercultural awareness, exposure to Francophone literatures and cultures, and a sufficient command of the language to enhance their chosen field of study, and countless career opportunities across the public, private and nonprofit sectors, including government, international development, journalism, law, communications and business.

Students in the French minor program at UNH are encouraged to complete some portion of their undergraduate studying abroad. Given the increasing globalization of our world, living abroad enhances cross-cultural awareness, competency, and adaptability. Students find that living and studying abroad expands their perspective, improves critical thinking, increases independence and better prepares them for a career in an increasingly global marketplace.

Requirements

Academic policies related to Minors.

The minor in French consists of completing five courses (20 credits).

Required Courses

Code	Title	Credits
Select 5 French courses numbered 503 and above		20
Total Credits		**20**

- No more than one course conducted in English (e.g., FREN 525 A Road Trip Through France: Baguette, Brie, Bordeaux, and Beyond) may be counted toward the minor.
- Students entering the minor at FREN 504 Intermediate French II or higher will be expected to complete FREN 651 Love, War, and Power in French Literature or FREN 652 Greatest Hits of French.

Geography (GEOG)

Geography, as the study of place, space and environment, addresses the "why of where" by uniting social and biophysical sciences, humanities and technology to examine the factors that make a place or environment unique. Connecting academic inquiry to real-world problem solving, our courses teach critical thinking skills that prepare students to transfer classroom and field experience into a wide range of careers. With interests ranging from globalization to climate change and sustainability, urbanization to community development at home and abroad, geography majors gain the knowledge, techniques and perspectives needed to meet current and future challenges.

Geography at UNH is an undergraduate-focused department offering both major and minor degree programs. With small class sizes, personalized advising by department faculty, and opportunities for independent study, our students receive a high degree of individual attention. UNH geography graduates are prepared to enter a variety of careers or professional and graduate degree programs.

https://cola.unh.edu/geography

Programs

- Environmental Justice (Minor) (p. 271)
- Geography (Minor) (p. 272)
- Geography Major (B.A.) (p. 272)

Faculty

Geography Department Faculty

Environmental Justice (Minor)

https://www.unh.edu/program/minor/environmental-justice

Description

The Environmental Justice Minor brings an interdisciplinary and geographic perspective to understanding linkages across social justice and environmental issues. The program is designed to attract students who desire the conceptual rigor of liberal arts coursework in social theory as well as marketable skills. Students will graduate with strengths bridging diverse fields of knowledge and synthesizing these into robust analyses to inform decision making. They will be well-positioned to support New Hampshire and our region into the future as our social and environmental policy challenges continue to evolve over time.

Requirements

Academic policies related to Minors.

- The Environmental Justice minor consists of 20 credits with a C- or better and a 2.0 grade-point average in courses that the minor department approves.
- A minimum of 8 credits of coursework toward the minor must be at the 600 or 700 levels.
- A minimum of 8 credits toward the minor must be coursework under the GEOG subject prefix.
- Students may count GEOG 795 Special Project for up to 4 credits in the Integrated Environmental Justice core category with permission from the Geography Department. This will require the thesis or project to focus on a topic that substantively advances the student's understanding of environmental justice issues through a deeply integrated social and environmental perspective.

- Up to three courses counted toward UNH Discovery category requirements can "double count" toward the minor.
- Up to two courses can be “cross-counted” toward both the Environmental Justic minor and another minor or major.

Code	Title	Credits
Requirements		
Environmental Justice Core		
Select one course from the following:		4
GEOG 581	Society, Environment and Justice	
GEOG 701	Environmental Justice	
Social Science Perspectives		
Select one course from the following:		4
GEOG 405	There Is No Planet B	
GEOG 500	Making Change: Social and Environmental Justice in Practice	
GEOG 550	Sub-Saharan Africa: Environmental Politics and Development	
GEOG 673	From Political Ecology to Climate Justice	
SOC 565	Environment and Society	
SOC 665	Environmental Sociology	
SOC 730	Communities and the Environment	
Racial Justice		
Select one course from the following: [1]		4
SOC 530	Sociology of Race and Ethnicity	
SOC 645	Class, Status and Power	
LLC 444I	US Latinx Cities: Urban Culture, Society and Space	
NAIS 400	Introduction to Native American and Indigenous Studies	
EDUC 525	The Idea of Race in Teaching and Learning	
CLAS 551	Race, Ethnicity, Class & Classics	
PHIL 419	Race, Gender and Social Justice	
ENGL 440A	Honors/On Race in Culture and Society	
ENGL 550	Introduction to the Literature and Culture of Race	
ENGL 581	Reading the Postcolonial Experience	
ENGL 738	Asian American Studies	
ENGL 778	Race and Gender in Film and Popular Culture	
CMN 567	Gender, Race, and Class in the Media	
CMN 614	Gender, Race and Technology	
Biophysical Environment		
Select one course from the following: [2]		4
GEOG 670	Climate and Society	
GEOG 560	Natural Hazards and Human Disasters	
GEOG 572	Geography of the Natural Environment	
GEOG 574	Global Landscapes and Environmental Processes	
NR 743	Addressing Arctic Challenges	
Spatial Analysis		
Select one course from the following: [3]		4
GEOG 591	Making Maps: GIS Fundamentals	
NR 658	Introduction to Geographic Information Systems	
ESCI 777	GIS for Earth & Environmental Sciences	
Total Credits		**20**

1 Alternate courses on racial justice by Geography Department approval.

2 Alternate biological science, physical science, or engineering courses above the 400 level by Geography Department approval.
Students completing a major or minor in the following departments can substitute a relevant course at the 500 level or above: Natural Resources and the Environment, Molecular, Cellular, and Biomedical Sciences, Agriculture, Nutrition and Food Systems, Chemical Engineering and Bioengineering, Civil and Environmental Engineering, Earth Sciences, Biological Sciences

3 Alternate GIS courses by Geography Department approval.

Student Learning Outcomes

Program Learning Outcomes

Integration across disciplines

- Students will integrate social science, spatial, and biophysical perspectives across Geography and other disciplines to understand social justice implications of environmental decisions.

Spatial Analysis

- Students will analyze the spatial relationship between social justice and environment using Geographic Information System (GIS) tools.

Geography (Minor)

https://www.unh.edu/program/minor/geography

Description

The geography minor allows undergraduates to explore one or more of the three main areas of geography — human geography, environmental geography and geotechniques. Studying geography prepares students to pursue a wide variety of careers or enter graduate school.

Requirements

Academic policies related to Minors.

- Students must complete five geography (GEOG) courses (20 credits) for the minor with a minimum grade of C- or better.

Required Courses

Code	Title	Credits
Select five geography courses		20
Total Credits		**20**

Geography Major (B.A.)

https://www.unh.edu/program/bachelor-arts/geography

Description

The geography major provides undergraduates with a solid foundation in geography by uniting social and biophysical sciences, humanities and technology to examine the factors that make a place or environment unique. Connecting academic inquiry to real-world problem solving, you will develop critical thinking skills and be prepared to transfer classroom and field experience into a wide range of careers.

With interests ranging from globalization to climate change and sustainability, urbanization to community development at home and abroad, UNH geography graduates have gone on to careers in urban, regional and transportation planning, community development, environmental conservation and natural resources management, sustainability science, geographic information science, market research, locational analysis, population studies, foreign aid, international diplomacy and education.

Students intending to major in geography should consult with the department chairperson.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students must complete 10 Geography courses (40 credits) with a minimum grade of C-minus.

Students complete foundation courses intended to provide a basic understanding of human, physical, and world regional geography. It is recommended the courses be taken as early as possible in a student's program. Students also complete required skills courses, which provide the basic analytical and technical skills used in geography, electives, and a capstone course.

Code	Title	Credits
Foundation Courses		
GEOG 401	World Regions: Europe and the Americas	4
or GEOG 402	World Regions: Asia and Africa	
GEOG 572	Geography of the Natural Environment	4
GEOG 580	Human Geography: People and Places	4
Skills Courses		
GEOG 591	Making Maps: GIS Fundamentals	4
Elective Courses		
Select five courses from the following: [1]		20
GEOG 405	There Is No Planet B	
GEOG 473	Elements of Weather	
GEOG 530	China: People, Politics and Economy	
GEOG 550	Sub-Saharan Africa: Environmental Politics and Development	
GEOG 560	Natural Hazards and Human Disasters	
GEOG 572	Geography of the Natural Environment	
GEOG 574	Global Landscapes and Environmental Processes	
GEOG 581	Society, Environment and Justice	
GEOG 582	Global Trade and Local Development	
GEOG 591	Making Maps: GIS Fundamentals	
GEOG 670	Climate and Society	
GEOG 673	From Political Ecology to Climate Justice	
Capstone		
Select one 600-level Writing Intensive course from the following:		4
GEOG 670	Climate and Society	
GEOG 673	From Political Ecology to Climate Justice	
Total Credits		**40**

Geotechniques

Students interested in geographic information systems, remote sensing, locational analysis, and other geographic techniques may specialize in Geotechniques by completing three 700-level methods courses in Geography (GEOG 750-769).

[1] Any GEOG course, excluding GEOG 401 and GEOG 402.

Independent study courses including GEOG 695 Internship and GEOG 795 Special Project may be applied to the major elective requirement once if taken for a total of four (4) credits.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
GEOG 401 or GEOG 402	World Regions: Europe and the Americas or World Regions: Asia and Africa	4
Discovery Course		4
Language Course		4
First Year Seminar		1
	Credits	**17**
Spring		
GEOG 400-level Course		4
Language Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
GEOG 580	Human Geography: People and Places	4
GEOG 572	Geography of the Natural Environment	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
GEOG 591	Making Maps: GIS Fundamentals	4
Discovery Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Third Year		
Fall		
GEOG 500-level Course		4
GEOG 600-level Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
GEOG 600-level Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**

Fourth Year	
Fall	
GEOG 600-level Course	4
Course selected in consultation with advisor [1]	4
Course selected in consultation with advisor [1]	4
Course selected in consultation with advisor [1]	4
Credits	**16**
Spring	
GEOG 600-level Course	4
Course selected in consultation with advisor [1]	4
Course selected in consultation with advisor [1]	4
Course selected in consultation with advisor [1]	4
Credits	**16**
Total Credits	**129**

[1] Students can explore a second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

- Integrate biophysical and socio-cultural disciplinary traditions to explain the complex interrelationships between and among human-natural systems spanning local to global scales.
- Communicate geographic concepts, research, and methods of analysis professionally and effectively through written products, oral presentations, and visualizations appropriate for the intended audience.

German (GERM)

German is the most widely spoken language in Europe, and Germany plays a leading role in a number of areas: EU and global trade and policy, fine arts, alternative energy and sustainability, engineering, philosophy. With their rich cultural and intellectual history, as well as one of the world's primary export-driven economies, the German-speaking countries offer unique career opportunities for globally minded students and citizens.

The University allows students to attend approved study abroad programs for UNH credit at schools in Germany and Austria. Students may attend accredited semester or summer programs at universities in cities like Munich, Vienna, Berlin, Heidelberg, Freiburg or Salzburg. Most study abroad programs require a minimum of two years of college German. For details, see the coordinator of German or the UNH Global Education Center. Internships with a German firm or organization may also be taken for credit (see GERM 595 Internship (p.)). Internships must be approved ahead of time in collaboration with an advisor in the German program. Financial aid applies to all approved programs.

https://cola.unh.edu/languages-literatures-cultures

Programs

- German Major (B.A.) (p. 274)
- German Minor (p. 276)

Faculty

Languages, Literatures and Cultures Department Faculty

German Major (B.A.)

https://www.unh.edu/program/bachelor-arts/german

Description

The German major is offered by the Department of Languages, Literatures and Cultures. This program is of interest to the following groups of students:

- Those who have a special interest in the German language, literature and culture.
- Those who intend to enter fields in which a background in foreign languages and cultures is desirable, such as business, engineering, the sciences, law, international affairs, government service and international service.
- Those who plan to teach German in secondary schools. Since most secondary schools require their teachers to teach more than one subject, students planning to enter teaching at this level should plan their programs carefully. They should combine a major in one culture and language with a minor or at least a meaningful sequence of courses in another subject. Dual majors also are possible. For certification requirements, see the section coordinator.

All German majors are strongly encouraged to double major or include a relevant minor in their studies.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The required minimum overall GPA in major coursework is 2.0.

All students must complete at least 10 classes (40 credits). All coursework required for German major must be completed with a grade C- or better. Specific course requirements are:

Code	Title	Credits
Language Courses [1]		
Students entering major at a higher language level will replace the language courses with additional electives.		
GERM 401	Elementary German I	
GERM 402	Elementary German II	
GERM 503	Intermediate German I	
GERM 504	Intermediate German II	

GERM 631W	Advanced Communications Skills I	
GERM 632	Advanced Communications Skills II	
Electives [2]		
Select a minimum of three courses from the following Culture, Linguistics, and Literature category		
GERM 525	Introduction to German Culture and Civilization	4
GERM 586	Study in Berlin	
GERM 728	Modern German Literature	
GERM 732	Public Discourse and Current Affairs	
GERM 797	Special Studies in German Language and Literature	
GERM 798	Special Studies in German Language and Literature	
LLC 535A	Professional Culture in Europe	
LLC 540	Film History	
LLC 552	Comparative Literature: Masterpieces of World Literature II	
LLC 560	Divine Madness and Dangerous Minds! - Mental Health in Literature and Art	
LLC 791	Methods of Foreign Language Teaching	
Capstone: [3]		
LLC 790	World Languages Capstone	
Study Abroad		

Study abroad is a requirement for the German major, although an approved equivalent high-impact experience may be substituted for study abroad with a compelling justification.

1 While the major may start counting as early as the Elementary I level (GERM 401), those who enter the major at a higher level (GERM 503, GERM 504, GERM 631W or GERM 632) will replace the courses they skip from the elementary, intermediate and advanced language category with additional courses from the electives category.

2 More electives required if fewer language credits were completed due to proficiency level and placement.

Students are encouraged to take as many of the culture, linguistics, and literature elective in the German language as possible, but there is no limit on the number of classes conducted in English from electives category. Students taking no classes in the target language in a given semester will be strongly encouraged to enroll in one credit of conversation hour to maintain their language skills, and many of the courses taught in English will allow students the option to (or even require students to) do some work in the target language.

3 Or approved equivalent 700-level course taken at UNH, approved study abroad equivalent, or approved high-impact experience (such as internship with a robust target language/culture component).

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

German majors may use two major-required courses to satisfy two Discovery category requirements.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
Language Major Course		4
Discovery Course		4
Discovery Course		4
First Year Seminar		1
	Credits	**17**
Spring		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Second Year		
Fall		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Study Abroad (summer and year-long abroad is also available)		16
	Credits	**16**
Fourth Year		
Fall		
Language Major Capstone Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Language Major Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

Specific outcomes for Linguistic Competency: The German Program applies the ACTFL Proficiency Guidelines to evaluate the linguistic competency of its graduates.

Specific outcomes for Integrative Knowledge: Accompanying the acquisition of German language skills is the study of cultural phenomena, which provides German majors with a breadth of knowledge as found in a traditional liberal arts program. The acquired knowledge helps students engage with various additional fields of study across the UNH campus. Through transferable practice in abstract reasoning, critical examination, and constructive articulation, students extend their intellectual curiosity and learn to aspire to life-long learning.

Linguistic Competency

- Speaking Proficiency: Graduates of the program achieve a speaking proficiency of Intermediate High to Advanced Mid, with the majority of students achieving the level of Advanced Low. Students demonstrate an ability to speak clearly and with precision about personal, professional, and academic topics.
- Writing Proficiency: Graduates of the program achieve a written proficiency of Intermediate High to Advanced Mid, with the majority of students achieving the level of Advanced Low. Students demonstrate an ability to write clearly about professional or academic topics, including introductory research in the area of literature and culture studies.
- Listening Proficiency: Graduates of the program achieve a listening proficiency of Advanced Low to Advanced High, with the majority of students achieving the level of Advanced Mid. Students demonstrate an ability to understand conventional as well as complex narratives that may use uncommon vocabulary or address difficult topics, such as theater plays in the target language.
- Reading Proficiency: Graduates of the program achieve a reading proficiency of Advanced Low to Advanced Mid. Students demonstrate an ability to read and interpret conventional quotidian texts as well as complicated narratives from the 18th-21st centuries, addressing a wide range of topics and genres, including literary, scientific, and cultural theory.

Integrative Knowledge

- Interpretive Reasoning: Particularly in the advanced courses that analyze art in its various forms – literature, film, painting, performance art, et. al. -, we (students and faculty alike) wrestle with interpretation and contextualization. In these courses, we are invested in humanistic inquiry and address tough questions – those concerning value and meaning, realms of knowledge ungraspable by natural science alone. Patterns of narrative, traditions of rhetoric, and history all inform the analyses of the cultural artifacts under study. By fostering the skills of close reading and listening, German majors become more articulate (both in German and their native language) and more proficient in analyzing and synthesizing the various types of knowledge.
- Critical-Constructive Thinking: In the analysis of cultural artifacts, students learn to consider a multitude of perspectives. In addition to critical thinking skills, German majors become better versed at the constructive synthesis. Term papers and presentations in the target language are the culmination of linguistic comprehension and production as well as of interpretation and critique. In assembling such larger projects, German majors learn to construct well-informed arguments that are based on interpretation and scholarly critique.
- Interdisciplinarity: Language study entails a wide range of applications, both personal and professional. It opens up possibilities for travel, genuine encounter, and the fostering of diplomatic and business relationships. German is of particular interest for political, economic, historical, and cultural reasons. With strengths in engineering and heavy manufacturing, Germany is of vital political-economic importance. Our students are encouraged to explore the connections in various scientific fields, the business world, and the humanities at large.
- Transformative Education: Close mentoring of our German majors leads to relevant study-abroad opportunities in which our students make tangible use of their intellectual skillsets in the target culture. Of equal importance, however, is the notion that the actual application of the skillsets during the study abroad experience (but also in our classrooms) offers an opportunity for students to achieve meaningful personal growth by realizing their own cultural underpinnings. As a result of their study of German, some students choose to go to or to return to Germany for work or travel. Thus, the study of German can result in transformative moments in the lives of our students.

German Minor

https://www.unh.edu/program/minor/german

Description

The German minor is offered by the Department of Languages, Literatures and Cultures. This program is of interest to the following groups of students:

- Those who have a special interest in the German language, literature and culture.
- Those who intend to enter fields in which a background in foreign languages and cultures is desirable, such as business, engineering, the sciences, law, international affairs, government service and international service.

Requirements

Academic policies related to Minors.

A minor in German consists of completing five courses (20 credits).

Required Courses

Code	Title	Credits
Five electives selected from GERM 503 or above		20
Total Credits		**20**

The minor may include one course taught in English but not LLC 791 Methods of Foreign Language Teaching.

Students interested in the minor should contact a faculty member from the German program to discuss their course of study.

History (HIST)

The Department of History is one of the top history departments in the country, with an internationally recognized faculty in American, European, and World and Ancient history. History professors have won some of the most important prizes in the profession, and they often appear on television and other media outlets. But what really distinguishes the department's faculty is that we love to teach. Our courses cover a wide

range of times, places and subjects, from ancient history to the history of the modern world.

History is a flexible major, which makes it a good choice for students who want to complete a double major in another discipline. Popular double majors include communication, justice studies, economics and international affairs.

The Education Department's 4+1 graduate program is also available to history majors. Students who complete that program receive their social studies teacher certification in five years and graduate with a B.A. and M.Ed. or M.A.T.

The Department offers a major and minor in history. We also administer an interdisciplinary minor, the social studies of science and technology.

The History Department at UNH has approximately 200 undergraduate majors; about 50 students graduate with a history major every year.

Five-Year BA/MA Program

The History Department offers our majors an opportunity to complete an accelerated Master's Degree in history in as little as one additional year of study. Eligible seniors and juniors are able to take up to 12 credits in graduate history courses, which will count both toward the completion of the history B.A. requirements, and the history M.A. requirements. This accelerated option is available for both the standard track M.A. and the museum studies track.

To be eligible for the program students must have a GPA of 3.2 or higher. Students also must have completed 96 credits by the time they enter the accelerated M.A. program.

Students should apply before April 10th of their junior year. Students interested in applying must complete the UNH graduate studies application. Applications will include two letters of recommendation, a cover letter, a writing sample and a UNH transcript. GRE scores are NOT required. Students should also submit a cover letter and an endorsement from a member of the History Department directly to the graduate director, Professor J (david.bachrach@unh.edu)ason Sokol (jason.sokol@unh.edu).

If you are interested in applying for the accelerated M.A. program, or would like additional information about the program, please contact Professor Jason Sokol.

https://cola.unh.edu/history

Programs

- History Major (B.A.) (p. 277)
- History Major: Law 3+3 Option (B.A.) (p. 280)
- History Minor (p. 282)
- Social Studies of Science and Technology Minor (p. 283)

Faculty

History Department Faculty

History Major (B.A.)

https://www.unh.edu/program/bachelor-arts/history

Description

The study of history gives students the analytical and communication skills necessary to succeed in today's workplace. It is also essential for being an informed citizen. The history major covers an array of subjects: the Roman Empire, modern U.S. foreign policy, China's Cultural Revolution, medieval Islam, the American Revolution and many, many others. Every major takes an introductory seminar on historical writing and analysis, and the major concludes with a senior colloquium that allows students to conduct in-depth research on a topic of their choosing. History is a flexible major. That makes history an excellent choice for students who plan to study abroad or who want to complete a double major in another discipline.

Students sometimes ask, "what can you do with a history major?" The answer is practically anything you want. History majors have attended some of the top graduate programs in the country. Many become teachers, but history majors also go into law, medicine and business, as well as careers in technology, international relations, politics and the media. Majoring in history prepares students well for the intellectual flexibility and ability to think outside the box that today's job market demands.

Undergraduate Awards for Majors

The Philip M. Marston Scholarship, an award of $500, is available to students who are interested in colonial or New England history and have demonstrated financial need. There are course requirements for this scholarship. More details are available from the history office.

Each spring, the members of the departmental undergraduate committee choose history majors to receive the following prizes in history:

- The William Greenleaf Prize is given for the best senior colloquium paper. Award candidates must have a minimum grade-point average of 3.2 in history courses. Individuals may nominate themselves or may be nominated by faculty members.
- The Allen Linden Prize for the best senior history thesis is funded by the Signal Fund.
- The Charles Clark Prize is for the best essay or research paper submitted by a history major and is funded by the Signal Fund.

Phi Alpha Theta, the history honor society, is an international scholastic organization dedicated to promoting historical study on the undergraduate and graduate levels. Admission to the UNH Psi Pi chapter is open to undergraduates with an overall grade-point average of 3.0, a grade-point average of 3.4 or better in history courses, and completion of HIST 500 Introduction to Historical Thinking.

Five-Year BA/MA Program

The History Department offers our majors an opportunity to complete an accelerated Master's Degree in history in as little as one additional year of study. Eligible seniors and juniors are able to take up to 12 credits in graduate history courses, which will count both toward the completion of the history B.A. requirements, and the history M.A. requirements. This accelerated option is available for both the standard track M.A. and the museum studies track.

To be eligible for the program students must have a GPA of 3.2 or higher. Students also must have completed 96 credits by the time they enter the accelerated M.A. program.

Students should apply before April 10th of their junior year. Students interested in applying must complete the UNH graduate studies application. Applications will include two letters of recommendation, a cover letter, a writing sample and a UNH transcript. GRE scores are NOT required. Students should also submit a cover letter and an endorsement from a member of the History Department directly to the graduate director, Professor Jason Sokol (jason.sokol@unh.edu).

If you are interested in applying for the accelerated M.A. program, or would like additional information about the program, please contact Professor Jason Sokol.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

To complete a major in history, students must take ten (10) 4-credit history courses or their equivalent. Students who enter the University as history majors, or who declare a major in history, should take the first required course, HIST 500, as soon as possible. To declare a major in history, students must have completed or be enrolled in two history courses. HIST 500 is a prerequisite for the second required course, HIST 797, which fulfills the Discovery Program capstone requirement for history majors and is taken during the senior year. Students should consult the list of topics for HIST 797 advertised each semester.

Code	Title	Credits
HIST 500	Introduction to Historical Thinking	4
HIST 797	Colloquium	4
At least eight (8) additional courses, following the guidelines below. No more than two (2) may be at the 400-level and a minimum of three (3) must be at the 600-level or above.		32
Total Credits		**40**

A student's program of study must include two parts:

1. An area of specialization. A student must select at least four courses to serve as an area of specialization within the major. Up to two courses (each four credits or their equivalent) in the area of specialization may be taken in other departments; such courses must be 500-level or above and have the approval of the student's advisor. The area of specialization may be in a nation, region, a time period, global history, or one of the following:
   * ancient and pre-modern worlds
   * cultural and intellectual history
   * empires and colonialism
   * international and diplomatic history
   * politics, law, and government
   * race, gender, and sexuality
   * religion
   * revolution and social change
   * science, technology, medicine, and the environment
   * war and society
   * world economy
   * design your own (with advisor's permission)
2. Complementary courses. A student must select, in consultation with his or her advisor, at least three history courses in fields outside the area of specialization, chosen to broaden his or her understanding of the range of history. Each major should take at least one course from each of Groups I, II, and III. Group I contains all American history courses, Group II contains all European history courses, and Group III contains all other history courses.

The program must be planned in consultation with an advisor. A copy of the program, signed by the advisor, must be placed in a student's file no later than the second semester of the student's junior year. Courses at the 700-level will be judged by the advisor as to their applicability for area of specialization. The program may be modified with the advisor's approval.

Only one HIST 695 Independent Study may be used to fulfill the 600-level requirement, and no more than two Independent Study courses may count toward the ten-course requirement. No more than two 400-level courses may be counted toward the major requirements. Students must receive at least a C in HIST 500 Introduction to Historical Thinking and at least a C- in the other nine courses. Majors must maintain a 2.0 or better in all history courses.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of Arts (B.A.) candidates must also satisfy the foreign language proficiency requirement.

History majors may use history courses to fulfill Discovery category requirements but may not double-count history courses for major and Discovery category requirements.

History majors must satisfy the language requirement for the B.A. degree in an international language that they could use for historical research. That list includes Arabic, Chinese, French, German, Greek, Italian, Latin, Russian, and Spanish. Students may petition the department curriculum committee for exceptions.

For transfer students, a minimum of five (5) of the semester courses used to fulfill the major requirements must be taken at the University. One upper-level course may be transferred to satisfy the requirement that a major must take at least three courses numbered 600 or above. Transfer students must complete both HIST 500 Introduction to Historical Thinking (or its equivalent) and HIST 797 Colloquium.

Students intending to major in history should consult with the department administrative assistant. Suggested programs for students with special interests or professional plans are available in the department office.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
Language Course		4
HIST Course		4
Discovery Course		4
First Year Seminar		1
	Credits	**17**
Spring		
Language Course		4
HIST Course		4
HIST Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
Course selected in consultation with Advisor [1]		4
HIST 500	Introduction to Historical Thinking	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
History 500-Level Course		4
Discovery Course		4
Course selected in consultation with Advisor [1]		4
Course selected in consultation with Advisor [1]		4
	Credits	**16**
Third Year		
Fall		
History 600-Level Or Higher		4
History 600-Level Or Higher		4
Discovery Course		4
Course selected in consultation with Advisor [1]		4
	Credits	**16**
Spring		
History 600-Level Or Higher		4
Discovery Course		4
Course selected in consultation with Advisor [1]		4
Course selected in consultation with Advisor [1]		4
	Credits	**16**
Fourth Year		
Fall		
HIST 797	Colloquium	4
Course selected in consultation with Advisor [1]		4
Course selected in consultation with Advisor [1]		4
Course selected in consultation with Advisor [1]		4
	Credits	**16**
Spring		
HIST Course		4
Course selected in consultation with Advisor [1]		4
Course selected in consultation with Advisor [1]		4
Course selected in consultation with Advisor [1]		4
	Credits	**16**
	Total Credits	**129**

[1] Students can explore a second major, minor, or general electives

Student Learning Outcomes

Program Learning Outcomes

Build historical knowledge.

- Gather and contextualize information in order to convey both the particularity of past lives and the scale of human experience.
- Recognize how humans in the past shaped their own unique historical moments and were shaped by those moments.
- Develop a body of historical knowledge with breadth of time and place—as well as depth of detail—in order to discern context.
- Distinguish the past from our very different present.

Develop historical methods.

- Recognize history as an interpretive account of the human past—one that historians create in the present from surviving evidence.
- Collect, sift, organize, question, synthesize, and interpret complex material.
- Practice ethical historical inquiry that makes use of and acknowledges sources from the past as well as the scholars who have interpreted that past.
- Develop empathy toward people in the context of their distinctive historical moments.

Recognize the provisional nature of knowledge, the disciplinary preference for complexity, and the comfort with ambiguity that history requires.

- Welcome contradictory perspectives and data, which enable us to provide more accurate accounts and construct stronger arguments.
- Describe past events from multiple perspectives.
- Explain and justify multiple causes of complex events and phenomena using conflicting sources.
- Identify, summarize, appraise, and synthesize other scholars' historical arguments.

Apply the range of skills it takes to decode the historical record because of its incomplete, complex, and contradictory nature.

- Consider a variety of historical sources for credibility, position, perspective, and relevance.
- Evaluate historical arguments, explaining how they were constructed and might be improved.
- Revise analyses and narratives when new evidence requires it.

Create historical arguments and narratives.

- Generate substantive, open-ended questions about the past and develop research strategies to answer them.
- Craft well-supported historical narratives, arguments, and reports of research findings in a variety of media for a variety of audiences.

Use historical perspective as central to active citizenship.

- Apply historical knowledge and historical thinking to contemporary issues.

- Develop positions that reflect deliberation, cooperation, and diverse perspectives.

History Major: Law 3+3 Option (B.A.)

https://www.unh.edu/program/bachelor-arts/history-law-33

Description

The Law 3+3 option offers highly motivated UNH undergraduates the opportunity to complete their bachelor's degree (B.A.) with a history major and their law degree (J.D.) at UNH in six years, rather than the usual seven years. It promises significant savings in both time and money. Students apply to the UNH Law School in their junior year (by Jan. 1), following the approved process below, and after taking the LSAT exam. If admitted, undergraduates begin their first year of law school in their senior year. The credits earned upon successful completion of the law school courses will be applied to both the J.D. degree and as elective courses for the B.A. degree. After four years, students receive a B.A. with a history major. After six years, students, having completed all law school requirements successfully, will receive their J.D.

Eligibility and Admission Process

1) **Phase I: applying to the Law 3+3 option.** Students apply to the program either when they submit their applications to UNH by selecting the History/J.D. option on the online application, or after they are admitted, applying directly to the History Department's History/Law 3+3 Committee. In both cases, undergraduate applicants must fulfill the general requirements for admission to the History major.

a. Students applying at time of admission to UNH will typically present the following high school (HS) credentials:

- a 3.5 GPA in HS
- a rigorous HS curriculum defined as the following:
  - 4 years of college prep (CP) or higher English
  - 4 years of CP or higher mathematics
  - 4 years of CP or higher social studies/history
  - Completed at least level 3 of a foreign language
  - 3 or more years of CP or higher laboratory sciences
- a score of 1200 or better (combined Math and Verbal) on the SAT or a 29 on the ACT)

b. Currently enrolled UNH students applying to the program must:

- have a 3.5 GPA in college courses at time of application.
- The History/Law 3+3 Committee governing admission to the program will also consider past SAT scores, maturity, and ability to complete a highly demanding program of study based on performance thus far.

For both groups, it is important to note that satisfying these requirements does not guarantee admission to this program. The review process is holistic (meaning all parts of the application carry weight and influence the final decision) and other components of the application will influence any admission decisions. Available space will also influence who is admitted to the program and how many students can be accepted.

2) **Phase 2: applying to UNH Law School**. To be eligible, students must:

- Complete all Discovery and major requirements, and accrue at least 98 credits before beginning law school in their senior year
- Maintain at least a 3.5 grade point average (including transfer credits) at time of application to law school, and at end of junior year
- Take the LSAT no later than December of the final undergraduate year (i.e. the junior year) and have a **score of 155 or above**
- Submit the law school application through the Law School Admissions Council by March 15 of the calendar year in which the student wishes to enroll in law school
- If, for some reason, students are not admitted to UNH Law, they will complete their final, fourth year at UNH, following the typical undergraduate program.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students in the History/Law 3+3 option complete the requirements of the history major. See the Degree Plan for the recommended path through the major.

To complete a major in history, students must take ten (10) 4-credit history courses or their equivalent. Students who enter the University as history majors, or who declare a major in history, should take the first required course, HIST 500, as soon as possible. To declare a major in history, students must have completed or be enrolled in two history courses. HIST 500 is a prerequisite for the second required course, HIST 797, which fulfills the Discovery Program capstone requirement for history majors and is taken during the senior year. Students should consult the list of topics for HIST 797 advertised each semester.

Code	Title	Credits
HIST 500	Introduction to Historical Thinking	4
HIST 797	Colloquium	4
At least eight (8) additional courses, following the guidelines below. No more than two (2) may be at the 400-level and a minimum of three (3) must be at the 600-level or above.		32
Total Credits		**40**

A student's program of study must include two parts:

1. An area of specialization. A student must select at least four courses to serve as an area of specialization within the major. Up to two courses (each four credits or their equivalent) in the area of specialization may be taken in other departments; such courses must be 500-level or above and have the approval of the student's advisor. The area of specialization may be in a nation, region, a time period, global history, or one of the following:
   * ancient and pre-modern worlds
   * cultural and intellectual history
   * empires and colonialism
   * international and diplomatic history

* politics, law, and government
* race, gender, and sexuality
* religion
* revolution and social change
* science, technology, medicine, and the environment
* war and society
* world economy
* design your own (with advisor's permission)

2. Complementary courses. A student must select, in consultation with his or her advisor, at least three history courses in fields outside the area of specialization, chosen to broaden his or her understanding of the range of history. Each major should take at least one course from each of Groups I, II, and III. Group I contains all American history courses, Group II contains all European history courses, and Group III contains all other history courses.

The program must be planned in consultation with an advisor. A copy of the program, signed by the advisor, must be placed in a student's file no later than the second semester of the student's junior year. Courses at the 700-level will be judged by the advisor as to their applicability for area of specialization. The program may be modified with the advisor's approval.

Only one HIST 695 Independent Study may be used to fulfill the 600-level requirement, and no more than two Independent Study courses may count toward the ten-course requirement. No more than two 400-level courses may be counted toward the major requirements. Students must receive at least a C in HIST 500 Introduction to Historical Thinking and at least a C- in the other nine courses. Majors must maintain a 2.0 or better in all history courses.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of Arts (B.A.) candidates must also satisfy the foreign language proficiency requirement.

History majors may use history courses to fulfill Discovery category requirements but may not double-count history courses for major and Discovery category requirements.

History majors must satisfy the language requirement for the B.A. degree in an international language that they could use for historical research. That list includes Arabic, Chinese, French, German, Greek, Italian, Japanese, Latin, Portuguese, Russian, and Spanish. Students may petition the department curriculum committee for exceptions.

For transfer students, a minimum of five (5) of the semester courses used to fulfill the major requirements must be taken at the University. One upper-level course may be transferred to satisfy the requirement that a major must take at least three courses numbered 600 or above. Transfer students must complete both HIST 500 Introduction to Historical Thinking (or its equivalent) and HIST 797 Colloquium.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

NOTE: Students should **plan early and work closely with their advisors** if they want to pursue the fast track program. It may be possible to include study abroad and other programs, if desired, but only with careful planning. They are also strongly encouraged to consult with the pre-law advisor on campus (Paula DiNardo, paula.dinardo@unh.edu, 603-862-2064.)

First Year		
Fall		**Credits**
Discovery Course		4
Discovery Course		4
History 400-level Course		4
Foreign Language Course		4
	Credits	**16**
Spring		
Discovery Course		4
Discovery Course		4
History 500-level Course (may be taken in Sem. 1 of sophomore year)		4
Foreign Language or Elective Course (if Foreign Language is completed in one semester)		4
	Credits	**16**
Second Year		
Fall		
Discovery Course		4
Discovery Course		4
History 500-level Course		4
History 600-level Course		4
	Credits	**16**
Spring		
Discovery Course		4
Discovery Course		4
History 500-level Course		4
History 600-level Course		4
PLUS one 2-credit course or two 1-credit courses. LAW 475 Getting Ready to Succeed in Law School is recommended (can be taken fall semester of junior year instead). [1]		2
	Credits	**18**
Third Year		
Fall		
Discovery Course		4
Discovery Course		4
History 600-level Course		4
History Course Elective any level (no more than two 400-level courses may be counted towards major)		4
If not taken sophomore year, one 2-credit course or two 1-credit courses must be taken. LAW 475 Getting Ready to Succeed in Law School is recommended. [1]		
	Credits	**16**
Spring		
HIST 797	Colloquium	4
History Elective Course any level (no more than two 400-level courses may be counted towards major)		4
Elective Course		4

Elective Course	4
Credits	**16**
Total Credits	**98**

TOTAL UNDERGRADUATE CREDITS REQUIRED - 98 cr.
40 total Discovery Program credits; 40 history credits; 4-8 foreign language credits; 8-12 elective credits; and two 1-credit courses OR one 2-credit course[1]. In addition to fulfilling the Discovery Program and history major requirements, students need to fulfill the Bachelor of Arts foreign language requirement and take four (4) writing intensive courses. HIST 500 Introduction to Historical Thinking and HIST 797 Colloquium fulfill two (2) WI courses.

[1] **Clarification**: to earn 98 credits in 3 years, **students will need to take one (1) 2-credit course or two (2) 1-credit courses**. The 2-credit course, LAW 475 Getting Ready to Succeed in Law School, is recommended and is best taken in the spring semester of sophomore year or the fall semester of the junior year as it will include LSAT prep. Other 2-credit options include JUST 550 Mock Trial and JUST 551 Mock Trial. For other possible 1-2 credit courses, see the Time & Room Schedule. The 1-2 credit courses can be completed at any point in your first 3 years at UNH-Durham. You can also complete them during the January term [see, e.g., THDA 531 The London Experience: Discovery, a 2-credit study abroad program] or in the summer.

Law School Degree Plan

Fourth Year/First Year Law school

Juris Doctor Sample Degree Plan

The schedule and track of the second and third years of law school are directed by each student with careful advising from the law school faculty.

Student Learning Outcomes

Program Learning Outcomes

Build historical knowledge.
- Gather and contextualize information in order to convey both the particularity of past lives and the scale of human experience.
- Recognize how humans in the past shaped their own unique historical moments and were shaped by those moments.
- Develop a body of historical knowledge with breadth of time and place—as well as depth of detail—in order to discern context.
- Distinguish the past from our very different present.

Develop historical methods.
- Recognize history as an interpretive account of the human past—one that historians create in the present from surviving evidence.
- Collect, sift, organize, question, synthesize, and interpret complex material.
- Practice ethical historical inquiry that makes use of and acknowledges sources from the past as well as the scholars who have interpreted that past.
- Develop empathy toward people in the context of their distinctive historical moments.

Recognize the provisional nature of knowledge, the disciplinary preference for complexity, and the comfort with ambiguity that history requires.
- Welcome contradictory perspectives and data, which enable us to provide more accurate accounts and construct stronger arguments.
- Describe past events from multiple perspectives.
- Explain and justify multiple causes of complex events and phenomena using conflicting sources.
- Identify, summarize, appraise, and synthesize other scholars' historical arguments.

Apply the range of skills it takes to decode the historical record because of its incomplete, complex, and contradictory nature.
- Consider a variety of historical sources for credibility, position, perspective, and relevance.
- Evaluate historical arguments, explaining how they were constructed and might be improved.
- Revise analyses and narratives when new evidence requires it.

Create historical arguments and narratives.
- Generate substantive, open-ended questions about the past and develop research strategies to answer them.
- Craft well-supported historical narratives, arguments, and reports of research findings in a variety of media for a variety of audiences.

Use historical perspective as central to active citizenship.
- Apply historical knowledge and historical thinking to contemporary issues.
- Develop positions that reflect deliberation, cooperation, and diverse perspectives.

History Minor

https://www.unh.edu/program/minor/history

Description

The study of history is an essential element of the liberal education. Studying history provides both an awareness of the past and the tools to evaluate and express one's knowledge.

Requirements

Academic policies related to Minors.

A minor in history consists of five courses (20 credits).

- A minimum grade of C- or better and 2.0 grade-point average is required in courses that the Department of History approves for the minor.
- No more than 12 credits in 400-level courses may be used for this minor.

Required Courses

Code	Title	Credits
Five elective HIST courses		20
Total Credits		**20**

Social Studies of Science and Technology Minor

https://www.unh.edu/program/minor/social-studies-science-technology

Description

How are our lives being changed by technology? Why is science so influential in our society? Is modern science superior to traditional ways of knowing nature? Are science and technology doing more harm than good? The minor in social studies of science and technology enables students to seek answers to such questions through the perspectives of the humanities and social sciences. In this minor, students select courses from a range of disciplines, including anthropology, history, communication, sociology and philosophy, all of which shed light on the role of science and technology in modern society.

The minor presupposes no specialized scientific background and may be combined with any undergraduate major.

Students interested in taking the minor should contact the coordinator, Joshua Lauer, Department of Communication, Horton Social Science Center.

Requirements

Academic policies related to Minors.

To complete a minor in social studies of science and technology, students must complete five courses (20 credits) with a grade of C- or better, choosing no more than three courses from a single department.

Code	Title	Credits
Required Courses		
Select five courses from the following:		20
CEE 520	Environmental Pollution and Protection: A Global Context	
CHBE 410	Energy and Environment	
CMN 696W	Seminar in Media Studies [1]	
CMN 772	Seminar in Media Theory (topic: Critical Approaches to New Media)	
ENGL 415C	Literature and Medicine	
GEOG 405	There Is No Planet B	
GEOG 670	Climate and Society	
HIST 425	Foreign Cultures (topic: Energy and Society: A Global History)	
HIST 498	Explorations of Historical Perspectives (topic: History of Animals)	
HIST 522	Science in the Modern World	
HIST 595	Explorations [1]	
HIST 600	Explorations (topic: Oil and Water of the Middle East)	
HIST 618	American Environmental History	
HIST 621	History of American Thought [1]	
HIST 654	Topics in History of Science	
HIST 690	Seminar: Historical Expl [1]	
PHIL 424	The Future of Humanity: Science, Technology, and Society	
PHIL 435	Human Nature and Evolution	
PHIL 447	A.I., Robots, and People	
PHIL 450	Environmental Ethics	
PHIL 630	Neuroscience and Philosophy	
PHIL 780	Special Topics [1]	
POLT 444	Politics and Policy in a Warming World	
PSYC 571	Pioneers of Psychology	
PSYC 791W	Special Topics [1]	
SOC 565	Environment and Society	
Total Credits		**20**

[1] with approval of topic by the coordinator

Homeland Security (HLS)

Homeland Security Major (B.S.)

Humanities (HUMA)

The humanities program examines the fundamental questions and issues of human civilization. Through studying diverse texts in the arts, music, literature, history, philosophy and science, students seek answers to questions that thoughtful human beings must address in the course of their lives. Whether these questions come from Socrates (What is justice?), from Sir Thomas More (What is obligation to God?), from Raphael (What is beauty?), from Newton (What are the laws of nature?) or from Martin Luther King, Jr. (What is freedom?), they direct our attention to enduring human concerns and to texts that have suggested or illustrated the most profound and powerful answers. The humanities program is housed in the Department of Classics, Humanities and Italian Studies.

https://cola.unh.edu/classics-humanities-italian-studies

Programs

- Humanities Dual Major (p. 283)
- Humanities Minor (p. 284)
- Interdisciplinary Humanities Major (B.A.) (p. 284)

Faculty

Classics, Humanities and Italian Studies Department Faculty

Humanities Dual Major

https://www.unh.edu/program/dual-major/humanities

Description

The dual major in humanities is structured in such a way that students can focus on a chosen primary major while taking advantage of the humanities program curriculum and its emphasis on analytical writing, critical thinking and well-rounded interdisciplinary cultural knowledge. Students combine our curriculum with another, disciplinary major that allows them to pursue a narrower field of study in some depth. The dual major in humanities offers students a set of tools and skills so they can understand and forge our 21st century world. Its curriculum provides structure, progression, and rigor. Citizens of the 21st century need to know how to analyze texts and navigate cultures. That is why the humanities are essential to the lives of educated people.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes, if primary major is a Bachelor of Arts

Declared Primary Major

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Humanities Dual Major Requirements

- The humanities dual major consists of a minimum of 32 credits of academic work, with a minimum grade of C-.
- Students cannot declare the dual major until they have declared a primary major.
- Students must have a GPA of 2.75 to be accepted to the dual major program.
- The required minimum overall GPA in major coursework is 2.0.

Code	Title	Credits
Core Requirements: Four Core Courses (16 Credits)		
HUMA 500	Critical Methods in the Humanities [1]	4
Select EITHER two of the following team-taught course topics		
Ancient Humanities: Cultures and Empires (HUMA 510 A, B, C, D)		
Medieval Humanities: Rise of Global Empires (HUMA 511 A, B, C)		
Modern Humanities: Colonies, Constitutions, and Capital (HUMA 512 A, B, C)		
Global Humanities (HUMA 513 A, B, C, D)		
Space, Place & the Environment (HUMA 514 A, B, C, D)		
OR one team-taught course PLUS		
HUMA 401/401W	Introduction to the Humanities	
Discovery Program Capstone		
Select from the following:		
HUMA 701W	Capstone Course (preferably during junior or senior year)	
or		
HUMA 798 & HUMA 799	Research Seminar and Research Seminar [3]	
Additional Requirements (16 Credits)		
Select four area courses in COLA (500 level or above) from at least three of five areas of disciplinary focus [4]		

1 Students will be made acquainted with the methods and technology required for research in humanities.

2 This seminar provides an opportunity for in-depth reading, viewing, and/or listening to texts and artifacts. The emphasis is on the multiple perspectives and methodologies that can be brought to bear upon these works from several humanistic disciplines.

3 Each student participates in the research tutorial (for a total of 6 credits) throughout the senior year. The tutorial provides a context within which students may discuss and receive direction in the course of completing a major research paper, the senior thesis. At the end of the second semester, students present their research to the faculty and their fellow students.

4 Selected with the advice and approval of each student's major adviser or the program coordinator. These offerings should bear some relation to the student's particular interests and senior research paper, as seems appropriate in each individual case.

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate the ability to find and evaluate primary and secondary source material necessary for humanistic research.
- Demonstrate the ability to propose, conduct, and present interdisciplinary humanistic research in a written, oral, or other forms. Identify and interpret creative and cultural forms from a given historical period.
- Compare and contrast the meanings of major texts and other significant cultural productions.

Humanities Minor

https://www.unh.edu/program/minor/humanities

Description

There has never been a more exciting time to be human—or has there? What exactly does it mean to be a human being in the twenty-first century? How can you get the most out of your humanity? Find out by minoring in the humanities. It can help prepare you for a life you may not have considered, in ways you've never imagined.

Requirements

Academic policies related to Minors.

The humanities minor consists of completing five courses (20 credits).

Code	Title	Credits
Required Courses		
Select two courses from the following HUMA Course Topic sequences:		8
Ancient Humanities: Cultures and Empires (HUMA 510 A, B, C, D)		
Medieval Humanities: Rise of Global Empires (HUMA 511 A, B, C)		
Modern Humanities: Colonies, Constitutions, and Capital (HUMA 512 A, B, C)		
Global Humanities (HUMA 513 A, B, C, D)		
Space, Place & the Environment (HUMA 514 A, B, C, D)		
Select two additional courses from other humanities program courses, one of which should be at the 600 level		8
HUMA 701W	Capstone Course (or another approved course)	4
or HUMA 798 & HUMA 799	Research Seminar and Research Seminar	
Total Credits		**20**

Interdisciplinary Humanities Major (B.A.)

https://www.unh.edu/program/bachelor-arts/interdisciplinary-humanities

Description

The interdisciplinary humanities program examines the fundamental questions and issues of human civilization. Through studying diverse texts in the arts, music, literature, history, philosophy, and science, students seek answers to questions that thoughtful human beings must address in the course of their lives. Whether these questions come from Socrates (What is justice?), from Sir Thomas More (What is obligation to God?), from Raphael (What is beauty?), from Newton (What are the laws of nature?), or from Martin Luther King, Jr. (What is freedom?), they direct our attention to enduring human concerns and to texts that have suggested or illustrated the most profound and powerful answers. The humanities program is housed in the Department of Classics, Humanities, and Italian Studies.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The major consists of a minimum of 40 credits of academic coursework, with a minimum grade of C-.

The required minimum overall GPA in major coursework is 2.0.

Code	Title	Credits
Required Core Courses		
One (1) 400-level HUMA course		4
HUMA 500	Critical Methods in the Humanities [1]	4
Select three of the following team-taught HUMA topic series courses:		12
-Ancient Humanities: Cultures and Empires (HUMA 510 A, B, C, D)		
-Medieval Humanities: Rise of Global Empires (HUMA 511 A, B, C)		
-Modern Humanities: Colonies, Constitutions, and Capital (HUMA 512 A, B, C)		
-Global Humanities (HUMA 513 A, B, C, D)		
-Space, Place & the Environment (HUMA 514 A, B, C, D)		
Discovery Program Capstone		
Select from the following: [2,3]		4
HUMA 701W	Capstone Course	
or		
HUMA 798 & HUMA 799	Research Seminar and Research Seminar	
Electives		
Select four electives from COLA at the 500-level or above. At least one must be at the 600-level or above. [4]		16
Total Credits		**40**

1. Students will be made acquainted with the methods and technology required for research in humanities.
2. This seminar provides an opportunity for in-depth reading, viewing, and/or listening to texts and artifacts. The emphasis is on the multiple perspectives and methodologies that can be brought to bear upon these works from several humanistic disciplines.
3. Each student participates in the research tutorial (for a total of 6 credits) throughout the senior year. The tutorial provides a context within which students may discuss and receive direction in the course of completing a major research paper, the senior thesis. At the end of the second semester, students present their research to the faculty and their fellow students.
4. Selected with the advice and approval of each student's major advisor or the program coordinator. These offerings should bear some relation to the student's particular interests and senior research paper, as seems appropriate in each individual case.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
HUMA 401	Introduction to the Humanities	4
Discovery Course [1]		4
Discovery Course [1]		4
	Credits	**16**
Spring		
HUMA 510/511/512/513/514		4
Discovery Course [1]		4
Discovery Course [1]		4
Elective/Major/Minor Course [1]		4
	Credits	**16**
Second Year		
Fall		
HUMA 500	Critical Methods in the Humanities	4
Discovery Course [1]		4
Discovery Course [1]		4
Elective/Minor Course [1]		4
	Credits	**16**
Spring		
HUMA 510/511/512/513/514		4
Discovery Course [1]		4
Discovery Course [1]		4
Elective/Minor Course [1]		4
	Credits	**16**
Third Year		
Fall		
HUMA 510/511/512/513/514		4
Discovery Course [1]		4
Discovery Course [1]		4
Elective/Minor Course [1]		4
	Credits	**16**
Spring		
500- or 600-level HUMA Elective [1]		4
Discovery Course [1]		4
Discovery Course [1]		4
Elective/Minor Course [1]		4
	Credits	**16**
Fourth Year		
Fall		
500- or 600-level HUMA Elective		4
Elective/Minor Course [1]		4
Elective/Minor Course [1]		4
Elective/Minor Course [1]		4

HUMA 798	Research Seminar (if pursuing thesis)	1
	Credits	**17**
Spring		
HUMA 701W or HUMA 799	Capstone Course or Research Seminar	4
500- or 600-level HUMA Elective [1]		4
Elective/Minor Course [1]		4
Elective/Minor Course [1]		4
	Credits	**16**
	Total Credits	**129**

[1] Course selected in consultation with advisor.

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate the ability to find and evaluate primary and secondary source material necessary for humanistic research.
- Demonstrate the ability to propose, conduct, and present interdisciplinary humanistic research in a written, oral, or other forms.
- Compare and contrast the meanings of major texts and other significant cultural productions.
- Identify and interpret creative and cultural forms from a given historical, cultural, or geographic context.

Italian Studies (ITAL)

The Italian studies program offers courses in Italian language, culture, literature, history and cinema, as well as courses on Italian American culture. Italian courses can also be used to fulfill Discovery Program requirements and the bachelor of arts foreign language proficiency requirement. In addition to the Italian studies major, an Italian studies minor is available.

The program provides opportunities both to achieve high competence in Italian language and culture and to apply these knowledge skills to other disciplines. The Italian studies program encourages independent and innovative thinking and research so that students may pursue and achieve individualized goals while they prepare for the challenges of thriving in the world community.

Study Abroad

The Italian studies program allows students to register for approved study abroad programs through the University.

https://cola.unh.edu/classics-humanities-italian-studies

Programs

- Italian Studies Major (B.A.) (p. 286)
- Italian Studies Minor (p. 288)

Faculty

Classics, Humanities and Italian Studies Department Faculty

Italian Studies Major (B.A.)

https://www.unh.edu/program/bachelor-arts/italian-studies

Description

The Italian studies program offers courses in Italian language, culture, literature, history and cinema, as well as courses on Italian American culture. The program provides opportunities both to achieve high competence in Italian language and culture and to apply these knowledge skills to other disciplines. The Italian studies program encourages independent and innovative thinking and research so that students may pursue and achieve individualized goals while they prepare for the challenges of thriving in the world community.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- The Italian studies major curriculum consists of 10 courses (40 credits).
- The minimum grade for each major course is a C.
- Once students declare the Italian studies major, they must maintain a 2.5 cumulative grade point average in order to fulfill the study abroad requirement.
- Italian studies majors may use two major-required courses to satisfy two Discovery category requirements.

Code	Title	Credits
Required Courses		
Select 16 credits at 600-level or above		16
Electives		
Select 24 credits in ITAL course electives (up to two courses in Classics (CLAS), Humanities (HUMA) or from the list of approved electives may substitute for two of these courses.)		24
Discovery Capstone		
Select one of the following capstone requirements:		
ITAL 701W	Capstone Course	
ITAL 796	Independent Study in Italian Language and Literature (Honors Thesis)	
ITAL 795	Independent Study in Italian Language and Literature (Senior Thesis)	
ITAL course at the 700-level (ITAL 733 or ITAL 775)		
ITAL 595	Practicum (Advisor approved 4-credit internship)	
INCO 685	Study Abroad (Advisor approved semester immersion experience in Italy)	
or INCO 686	Study Abroad	
Total Credits		**40**

Electives

Approval by the Italian studies advisor is required for elective courses not listed below.

Code	Title	Credits
Elective Courses		
All Classics (CLAS) and Humanities (HUMA) subject prefix courses are acceptable electives.		
Additional Approved Elective Courses		
ANTH 411	Global Perspectives on the Human Condition: An Introduction to Anthropology	4
ANTH 500	Peoples and Cultures of the World	4
ARTH 444	Mona Lisa to Much Ado About Nothing: An Introduction to Renaissance Culture	4
ARTH 474	Introduction to Architectural History	4
ARTH 480	Introduction to Art History	4
ARTH 583	Baroque Art: Realism, Caricature, Shock	4
ARTH 678	Romanesque and Gothic Art	4
ARTH 681	Early Renaissance Art	4
ARTH 682	The High Renaissance	4
ECON 645	International Economics	4
EDUC 500	Exploring Teaching	4
ENGL 419	How to Read Anything	4
ENGL 510		4
ENGL 533	Introduction to Film Studies	4
ENGL 618	Film Theory	4
ENGL 714	Critical Skills	4
GEOG 401	World Regions: Europe and the Americas	4
GEOG 581	Society, Environment and Justice	4
HIST 436	Europe and the Modern World	4
HIST 500	Introduction to Historical Thinking	4
HIST 501	Medieval Military History	4
HIST 540		4
HIST 565	Women in Modern Europe	4
HIST 641	Europe after the Black Death	4
IA 401	Foundations of International and Global Studies	4
IA 501	From Ideas to Evidence: Researching Global Issues	4
LLC 552	Comparative Literature: Masterpieces of World Literature II	4
LLC 791	Methods of Foreign Language Teaching	4
LING 405	Introduction to Linguistics	4
LING 605	Intermediate Linguistic Analysis	4
MKTG 760	International Marketing	4
MUSI 501	The Western Musical Canon	3
MUSI 502	Musics in Context	3
NUTR 595	Mediterranean Diet and Culture	4
PHIL 401	Introduction to Philosophy	4
PHIL 430	Ethics and Society	4
PHIL 560	Philosophy Through Fiction	4
PHIL 570	Ancient Philosophy	4
PHIL 580	Modern Philosophy from Descartes to Kant	4
PHIL 620	20th Century European Philosophy	4
POLT 550	Comparative Government and Society	4
POLT 551	Ethnicity ,Violence, Democracy	4
POLT 552	Contemporary European Politics	4
POLT 560	World Politics	4
SUST 401	Exploring Sustainability	4
THDA 436	History of Theatre I	4
THDA 438	History of Theatre II	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
ITAL 401	Elementary Italian I	4
ITAL 444 Course [1]		4
Discovery Course [1]		4
	Credits	**16**
Spring		
ITAL 402	Elementary Italian II	4
Discovery Course [1]		4
Discovery Course [1]		4
Elective/Major/Minor Course [1]		4
	Credits	**16**
Second Year		
Fall		
ITAL 503	Intermediate Italian I	4
ITAL 525	Italian Cinema	4
Discovery Course [1]		4
Elective/Minor Course [1]		4
	Credits	**16**
Spring		
ITAL 504	Intermediate Italian II	4
Discovery Course [1]		4
Discovery Course [1]		4
Elective/Minor Course [1]		4
	Credits	**16**
Third Year		
Fall		
ITAL 631	Advanced Conversation and Composition I	4
Discovery Course [1]		4
Discovery Course [1]		4
Elective/Minor Course [1]		4
	Credits	**16**
Spring		
ITAL 632	Advanced Conversation and Composition II	4
Discovery Course [1]		4
Discovery Course [1]		4
Elective/Minor Course [1]		4
	Credits	**16**
Fourth Year		
Fall		
ITAL 635	Italian Food Studies (or other 600-level italian culture course)	4
Elective: Advanced italian language course [1]		4
Elective/Minor Course [1]		4
Elective/Minor Course [1]		4
	Credits	**16**
Spring		
ITAL 701W	Capstone Course	4
Elective/Minor Course [1]		4
Elective/Minor Course [1]		4

Elective/Minor Course [1]	4
Credits	**16**
Total Credits	**128**

[1] Course selected in consultation with advisor.

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate speaking proficiency in Italian: Students speak Italian at the Advanced Level per standard guidelines established by the American Council on the Teaching of Foreign Languages (ACTFL).
- Demonstrate listening proficiency in Italian: Students' aural comprehension is at the Advanced Level per standard guidelines established by ACTFL.
- Demonstrate reading proficiency in Italian: Students' read at the Advanced Level per standard guidelines established by ACTFL.
- Demonstrate writing proficiency in Italian: Students' write at the Advanced Level per standard guidelines established by ACTFL.
- Exhibit contemporary cultural competency: Demonstrate knowledge of contemporary aspects of Italian culture and the ability to interact appropriately and effectively within diverse social and cultural contexts.
- Exhibit historical cultural competency: Identify the major movements in Italian cultural history and analyze critically Italian cultural production from the 13th century to the present through close readings and audio and visual texts (e.g., literature, cinema, music, visual arts, traditional and social media) to provide critical insight on a range of topics in Italian culture.
- Exhibit intercultural competency: Present a global perspective through the articulation of cultural differences as well as shared values between cultures, societies, and nations.
- Exhibit research competency: Demonstrate ability to conduct research in both Italian and English: to produce coherent analyses utilizing primary and secondary sources, applying critical thinking and methodologies of argumentation, and integrating disparate areas of knowledge.

Italian Studies Minor

https://www.unh.edu/program/minor/italian-studies

Description

The Italian studies minor provides students with the opportunity to explore the language, culture, and society of Italy through an interdisciplinary program. The minor is advantageous for applicants to graduate and professional schools in Italian, modern languages, linguistics, film, history, theater, philosophy and law. It is also a valuable asset for careers in economics, international affairs, international business, fashion, teaching, communications, translation, interpretation, government and Foreign Service.

The Italian studies minor is offered by the Department of Classics, Humanities and Italian Studies.

Requirements

Academic policies related to Minors.

The minor consists of five courses (20 credits)

All courses for either option listed below must be completed with a minimum grade of C.

Code	Title	Credits
Required		
Select one of the following options:		20
Option 1: Demonstrate linguistic proficiency at the level of intermediate Italian (by completing ITAL 504 or equivalent). One of the remaining elective courses may be from a related field of study, subject to the approval of the Italian Studies advisor.		
Option 2: Demonstrate linguistic proficiency at the level of elementary Italian (by completing ITAL 402 or equivalent). All additional courses must be ITAL course offerings..		
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

- Exhibit intercultural competency: Present a global perspective through the articulation of cultural \\ndifferences as well as shared values between cultures, societies, and nations.
- Exhibit historical cultural competency: Identify the major movements in Italian cultural history and analyze critically Italian cultural production from the 13th century to the present through close readings and audio and visual texts (e.g., literature, cinema, music, visual arts, traditional and social media) to provide critical insight on a range of topics in Italian culture.
- Exhibit contemporary cultural competency: Demonstrate knowledge of contemporary aspects of Italian culture and the ability to interact appropriately and effectively within diverse social and cultural contexts.
- Exhibit linguistic competency at the elementary or intermediate level per standard guidelines established by the American Council on the Teaching of Foreign Languages (ACTFL).

Justice Studies (JUST)

Justice studies students think critically about issues that are part of the national conversation concerning justice: race and policing, cybercrime, the opioid crisis, juvenile delinquency, sexual and interpersonal violence, immigrants and refugees, wrongful convictions and bullying. All majors do applied or research internships in New England or Washington, D.C. Many spend a semester studying in Budapest and participating in Mock Trial. Our graduates excel in various positions including FBI agents, federal probation and parole, police officers from local to federal levels, victim/witness advocates, prison wardens, police prosecutors, attorneys and juvenile justice advocates.

https://cola.unh.edu/justice-studies

Programs

- Justice Studies Dual Major (p. 289)
- Justice Studies Minor (p. 290)
- Forensics Minor (p. 290)

Faculty

Justice Studies Department Faculty

Justice Studies Dual Major

https://cola.unh.edu/justice-studies/program/justice-studies-dual-major

Description

The Justice Studies Dual Major is an interdisciplinary area that blends topics from humanities departments (e.g., Philosophy), social science departments (e.g., Psychology, Sociology, Women's and Gender Studies), departments that include both humanities and social science faculty (History, Political Science), and professionally-oriented departments (Education, Family Studies, Social Work). Topics studied include courts, family violence, rights, substance abuse, juvenile justice, school law, children as witnesses, hate crimes and community policing. Students will be required to choose a first major before they will be able to declare Justice Studies as a second major. The goal is to produce graduates who have a higher level of knowledge about law and justice in American society and in the world so that they will mature into more knowledgeable and effective citizens. The Justice Studies dual major is intended for students who are looking for careers in the justice system or who seek graduate training in law or social sciences and humanities related to the law.

Students are strongly encouraged to contact the Justice Studies Office and to declare the dual major as soon as they develop an interest in majoring. Once a student has been accepted to the JS dual major, they will be assigned an advisor.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes, if primary major is a Bachelor of Arts

Declared Primary Major

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Justice Studies Dual Major Requirements

- The dual major in justice studies requires students to take a minimum of eight courses (32 credits), each completed with a grade of a C- or better.
- Students are required to have a grade-point average of a 2.5 or better before they can be accepted into the program.
- The dual major cannot be declared until after a first major has been declared.
- Students can count no more than two courses for both the first major and dual major, and students are not allowed to take more than two courses from any one department (except for JUST).
- An unlimited number of dual major courses can be used to satisfy Discovery requirements.
- The required minimum overall GPA in major coursework is 2.5.

Code	Title	Credits
Required Courses		
JUST 401	Introduction to Justice Studies	4
JUST 501	Research Methods	4
JUST 601	Internship (seniors only)	4
JUST 701	Senior Seminar [1]	4
Select one course from the following:		4
JUST 595	Special Topics (Law & Society/First Amendment/Second Amendment)	
PHIL 420	Introduction to Philosophy of Law and Justice	
POLT 507	Politics of Crime and Justice	
POLT 508	Supreme Court and the Constitution	
POLT 513	Civil Rights and Liberties	
SOC 515	Introductory Criminology	
Elective Courses		
Select three elective courses from the justice studies approved course list below.		12
Total Credits		**32**

[1] This course fulfills the program capstone requirement.

Code	Title	Credits
Approved Elective Courses		
This list is approved and published yearly by the Justice Studies Executive Committee.		
ACC 747	Business Law	4
ANTH 550	Introduction to Forensic Anthropology	4
ANTH 665W	Forensic Cold Case Investigation	4
ANTH 697	Special Topics (must be approved by Justice Studies)	4
BIOL 420	Introduction to Forensic Sciences	4
CMN 637	Controversy and Reasoning in Law	4
HDFS 776	Children, Adolescents and the Law	4
HDFS 794	Families and the Law	4
HIST 440A	Martin Luther King, Jr., and the Struggle for Racial Justice	4
HIST 440D	Honors/Citizens and Persons	4
HIST 498	Explorations of Historical Perspectives (must be approved by Justice Studies)	4
HIST 509	Law in American Life	4
HIST 595	Explorations (The Roaring '20s: Becoming Modern in the U.S.)	4
HIST 600	Explorations (Immigrants and the Law)	4
HIST 609	Special Topics in American Legal History (must be approved by Justice Studies)	4
HIST 632	Latin American History: Topics (Human Rights and Social Justice in Latin America)	4
HLS 410	Introduction to Homeland Security	4
HLS 415	Fundamentals of Corporate Security	4
HLS 580	Environmental and Human Security	4
HLS 760	Strategic Planning and Decision Making	4
HUMA 444E	What is a Criminal?	4
HUMA 525	Humanities and the Law	4
HUMA 550	Budapest Spring Semester: Special Studies in Comparative Ideas	4
HUMA 551	Budapest Spring Semester: Field Studies in Art and Culture	6
JUST 405	Technology, Crime, and Society: A Forensic Exploration of High-Tech and Digital Crime	4
JUST 505	Breaking Down Breaking Bad: The Analysis of Hollywood Crime and Justice	4
JUST 520	Girls Gone Bad: Delinquent Girls in Cultural Context	4
JUST/SOC 535	Homicide	4
JUST 550 & JUST 551	Mock Trial and Mock Trial (must take 2 semesters to count as a JS elective)	4
JUST 591	Forensic Psychology	4
JUST 595	Special Topics (no more than two courses) [2]	4
JUST 795	Reading and Research (variable credit/permission required)	1-4
LLC 540	Film History (Terrorism(s) A Humanistic and Cinematic Outlook)	4
NR 602	Natural Resources and Environmental Policy	4
PHIL 420	Introduction to Philosophy of Law and Justice	4

PHIL 436/436H	Social and Political Philosophy	4
PHIL 660	Law, Medicine, and Ethics	4
PHIL 780	Special Topics (Freaks, Geeks, and Psychopaths)	4
POLT 440A	Honors/Global Justice (Global Justice)	4
POLT 444B	Cruel and Unusual in a Federal System	4
POLT 507	Politics of Crime and Justice	4
POLT 508	Supreme Court and the Constitution	4
POLT 548	Drug Wars	4
POLT 568	International Security	4
POLT 797B	Seminar in American Politics (must be approved by Justice Studies)	4
PSYC 755	Psychology and Law	4
PSYC 756	Psychology of Crime and Justice	4
PSYC 791W	Special Topics (Psychology of Delinquency)	4
RMP 772	Law and Public Policy in Leisure Services (must have junior/senior status)	4
SOC 515	Introductory Criminology	4
SOC 450	Contemporary Social Problems (only when taught by Professor Abbott)	4
SOC 525	Juvenile Crime and Delinquency	4
SOC/JUST 535	Homicide	4
SOC 620	Drugs and Society	4
SOC 636	Sociology of Justice	4
SOC 697	Special Topics (Social Psychology of Justice)	4
SOC 720	Sociology of Drug Use	4
SW 525	Social Welfare Policy: History of Social and Economic Justice	4
SW 705	Child and Adolescent Risks and Resiliency: Program, Policy and Practice	4

[2] Bill of Rights, The First Amendment, and Law & Society are allowed to count as the JS SOC/POLT requirement.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of Arts candidates must also satisfy the foreign language proficiency requirement.

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate knowledge of fundamental theoretical approaches and key disciplinary concepts of Justice Studies.
- Demonstrate understanding of justice studies methods of research design, data gathering, and analysis.
- Exhibit critical thinking skills in evaluating justice studies research, including the background assumptions, appropriateness of methods used and the strength of explanatory evidence.
- Communicate justice studies knowledge in appropriate oral, written and graphic forms.
- Experience justice studies either in the real world through an internship or in a research lab through a research internship.

Justice Studies Minor

https://cola.unh.edu/justice-studies/program/minor/justice-studies

Description

The justice studies minor is an interdisciplinary program that blends topics from humanities departments (e.g., philosophy), social science departments (e.g., psychology, sociology, women's and gender studies), departments that include both humanities and social science faculty (history, political science) and professionally oriented departments (education, family studies, social work). Topics studied include courts, family violence, rights, substance abuse, juvenile justice, school law, children as witnesses, hate crimes and community policing.

Requirements

The Minor in Justice Studies requires students to take a total of five courses (20 credits), each with a grade of C- or better, in order to complete the program. Students are allowed to "double count" no more than two courses toward their major and minor, and are not allowed to take more than two courses from any one department (except for Justice Studies). In order to officially declare the Minor in Justice Studies, students will need to submit an intent to minor form to Deb Briand in the Justice Studies Office. This form can be found on our website.

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
JUST 401	Introduction to Justice Studies	4
Select one course from the following:		4
JUST 595	Special Topics (Law & Society/First Amendment/Second Amendment)	
PHIL 420	Introduction to Philosophy of Law and Justice	
POLT 507	Politics of Crime and Justice	
POLT 508	Supreme Court and the Constitution	
POLT 513	Civil Rights and Liberties	
SOC 515	Introductory Criminology	
Elective Courses		
Select three elective courses from the justice studies approved course list [1]		12
Total Credits		**20**

[1] This list is approved and published yearly by the Justice Studies Executive Committee. Departmental offerings that are currently accepted for the minor are listed on the Justice Studies major page (p. 289).

Forensics Minor

https://cola.unh.edu/justice-studies/program/minor/forensics

Description

The forensics minor provides students with the opportunity to explore the different components of forensics through the interdisciplinary study of biology, psychology, sociology and justice studies. This well-rounded curriculum will enable students to build upon their interests in justice studies by specializing in an area of increasing importance. Once students have decided to pursue the minor, they are required to meet with the coordinator, academic counselor or appropriate affiliated faculty adviser at least once per semester for regular review and assessment of their program, learning outcomes and progress toward the degree.

Requirements

The forensic minor requires five courses (20 credits) drawn from a list of approved courses. Students must receive a grade of a C- or better for a course to count toward the minor requirements. Justice Studies Dual Majors are required to meet with their Justice Studies advisor before registering for courses each semester to ensure they are on track to completing both the dual major and forensic minor.

Two courses can double count toward your justice studies dual major. These courses are most commonly JUST 401 Introduction to Justice Studies, and SOC 515 Introductory Criminology.

In order to officially declare the forensic minor, students will need to submit an intent to minor form to Deb Briand in the Justice Studies Office. This form can be found on our website.

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
JUST 401	Introduction to Justice Studies	4
BIOL 420	Introduction to Forensic Sciences	4
Electives		
Select three courses from the following:		12
ANTH 550	Introduction to Forensic Anthropology	
ANTH 655	Bioarchaeology of the Human Past	
ANTH 660	Human Osteology	
ANTH 665W	Forensic Cold Case Investigation	
CHEM 403	General Chemistry I	
CHEM 404	General Chemistry II	
JUST 405	Technology, Crime, and Society: A Forensic Exploration of High-Tech and Digital Crime	
JUST 591	Forensic Psychology	
SOC 515	Introductory Criminology	
SOC/JUST 535	Homicide	
ZOOL 555	Introduction to Entomology	
Total Credits		**20**

Latin American, Latinx and Caribbean Studies

- Latin American, Latinx and Caribbean Studies Minor (p. 291)

Latin American, Latinx and Caribbean Studies Minor

https://www.unh.edu/program/minor/latin-american-latinx-caribbean-studies

Description

Latin American, Latinx and Caribbean studies is an interdisciplinary minor encompassing anthropology, communications, economics, geography, history, linguistics, political science and Spanish. Knowledge of Latin America is especially valuable for students who plan to work in education, international organizations, government, social services, and business or for graduate studies related to Latin America.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits) representing at least three disciplines as outlined below.

- A minimum grade of C or better is required in coursework for the minor.
- Academic study in Latin America is strongly recommended: Speak with faculty to help you find the study abroad program that best fits your interests. UNH and its affiliates offer several short- and long-term programs throughout Latin America.

Code	Title	Credits
Required Courses		
HIST 532	Modern Latin America [1]	4
SPAN 504	Intermediate Spanish II [2]	4
Electives		
Select three elective courses from the list below in consultation with an advisor.		12
Total Credits		**20**

1 Or an equivalent course approved by the minor advisor.
2 Minimum of high-intermediate level proficiency in Spanish. Equivalent courses or equivalent testing may be counted.

Electives Course List

Students should consult with an advisor or the course instructor to ensure that the majority of this coursework concentrates on Latin America.

Code	Title	Credits
ANTH 500	Peoples and Cultures of the World (Topic: Latin America)	4
ANTH 501	World Archaeological Cultures (Topic: Mesoamerica)	4
ANTH 674	Archaeological Survey and Mapping in Belize	4
ENGL 560	Introduction to Latinx Literature and Culture	4
HIST 425	Foreign Cultures (Topic: Women in Latin America)	4
HIST 532	Modern Latin America	4
HIST 632	Latin American History: Topics	4
LING 790	Special Topics in Linguistics Theory (Topic: Sustainable Languages)	4
POLT 403	United States in World Affairs	4
POLT 548	Drug Wars	4
POLT 795	Advanced Study (Topic: The Politics of Poverty)	1-4
SPAN 526	Introduction to Latin American Cultures	4
SPAN 631	Advanced Conversation and Composition I	4
SPAN 632	Advanced Conversation and Composition II	4
SPAN 641	Spanish Language Variation & Change	4
SPAN 647	Topics in Hispanic Cultural Studies	4
SPAN 648	The Hispanic World Today	4
SPAN 650	Hispanic Literature and Popular Culture	4
SPAN 654	Introduction to Latin American Literature and Thought	4
SPAN 797	Topics in Hispanic Literary and Cultural Studies	4
SPAN 798	Topics in Hispanic Linguistics and Cultural Studies	4
SW 697	Special Topics in Social Welfare (Topic: Social Action in the Dominican Republic)	4
SW 797	Special Topics in Social Welfare (Topic: Social Action in the Dominican Republic)	4

Linguistics (LING)

Linguistics is the study of one of the most important characteristics of human beings—language. It cuts across the boundaries between the sciences and the humanities. The program is an excellent liberal arts major or preprofessional major for education, law, medicine, clergy and others. It is a particularly appropriate major for students who want to teach English as a second language. Dual majors with a foreign language, international affairs, business administration and the like are quite feasible.

Students interested in the major or the minor should consult with the program coordinator or with any professor who teaches linguistics courses. To declare a major in linguistics, a student must meet with the linguistics coordinator to design a course of study.

https://cola.unh.edu/linguistics

Programs

- Linguistics Major (B.A.) (p. 292)
- Linguistics Minor (p. 293)
- TESOL Minor (p. 294)

Faculty

Linguistics Department Faculty

Linguistics Major (B.A.)

https://www.unh.edu/program/bachelor-arts/linguistics

Description

Linguistics is the study of one of the most important characteristics of human beings—language. It cuts across the boundaries between the sciences and the humanities. The program is an excellent liberal arts major or preprofessional major for education, law, medicine, clergy and others. It is a particularly appropriate major for students who want to teach English as a second language. Dual majors with a foreign language, international affairs, business administration and the like are quite feasible.

Students interested in the major should consult with the program coordinator or with any professor who teaches linguistics courses. To declare a major in linguistics, a student must meet with the linguistics coordinator to design a course of study. Information is available from the University Advising Center, 101 Hood House, and at cola.unh.edu/linguistics. Students may also contact Professor Rachel Burdin (rachel.burdin@unh.edu), Linguistics Program Coordinator, with questions about major or minor requirements.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The required minimum overall GPA in major coursework is 2.0.

Linguistic majors may use one major-required course to satisfy one Discovery Program category requirement.

Code	Title	Credits
Required Courses		
LING 405	Introduction to Linguistics	4
Sounds of Language		
Select one course from the following:		4
LING 603	Phonetics	
LING 604	Phonology	
Sentence Structure or Meaning		
Select one course from the following:		4
LING 607	Syntax	
LING 608	Semantics	
Historical Linguistics or Sociolinguistics		
Select one course from the following:		4
ENGL 752	History of the English Language	
LING/ENGL 719	Sociolinguistics Survey	
RUSS 733	History of Slavic Languages and Culture	
SPAN 798	Topics in Hispanic Linguistics and Cultural Studies (Subtopic A)	
Foreign Language		
Two years of college study (or equivalent) of one foreign language		4-16
Cognate Specialties		
Select one of the following:		8
One year study (or equivalent) of a second foreign language from a different language family or subfamily [1]		
PSYC 712W	Psychology of Language [2]	
Electives		
Select three elective courses from below list, two of which must be a 600- or 700- level LING or ENGL course [3]		8
Discovery Program Capstone Experience		
LING 779	Linguistic Field Methods	4
or LING 695	Senior Honors	
Total Credits		**40-52**

1 Old English may count as the second foreign language if the first foreign language is not in the Germanic family.

2 With its prerequisite, either PSYC 512 Psychology of Primates or PSYC 513 Cognitive Psychology

3 History of the English Language or Sociolinguistics may serve as electives if not used to fulfill the *Historical or Sociolinguistic* requirement. Similarly, Phonetics, Phonology, Syntax, and Semantics may count as electives if not used to fulfill the *Sounds of Language* or *Sentence Structure or Meaning* requirement.

Elective Courses

Code	Title	Credits
Anthropology		
ANTH 795	Reading and Research (Subtopic B)	1-8
ANTH 796	Reading and Research (Subtopic B)	1-8
Communication		
CMN 666	Conversation Analysis	4
English		
ENGL 604	Phonology	4
ENGL 603	Phonetics	4
ENGL 606	Languages of the World	4
ENGL 607	Syntax	4
ENGL 608	Semantics	4
ENGL 715	Teaching English as a Second Language: Theory and Methods	4
ENGL 716	Curriculum, Materials and Assessment in English as a Second Language	4
ENGL 718	Morphology	4
ENGL 719	Sociolinguistics Survey	4
ENGL 728	Language and Gender	4
ENGL 752	History of the English Language	4
ENGL 790	Special Topics in Linguistics	4
ENGL 791	English Grammar	4
LLC		
LLC 791	Methods of Foreign Language Teaching	4
Linguistics		
LING 606	Languages of the World	4
LING 603	Phonetics	4
LING 604	Phonology	4
LING 607	Syntax	4
LING 608	Semantics	4

LING 718	Morphology	4
LING 719	Sociolinguistics Survey	4
LING 728	Language and Gender	4
LING 790	Special Topics in Linguistics Theory	4
Psychology		
PSYC 512	Psychology of Primates [1]	4
PSYC 513	Cognitive Psychology [1]	4
PSYC 712W	Psychology of Language	4
Russian		
RUSS 733	History of Slavic Languages and Culture	4
Spanish		
SPAN 641	Spanish Language Variation & Change	4
SPAN 645	Intro to Spanish Linguistics	4
SPAN 798	Topics in Hispanic Linguistics and Cultural Studies (Subtopic A)	4

[1] Students may count either PSYC 512 Psychology of Primates or PSYC 513 Cognitive Psychology toward the linguistics major or minor, but not both.

Alternative courses may be substituted, with the permission of the student's advisor and the linguistics committee, if they are relevant to the the student's academic program.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Student Learning Outcomes

Program Learning Outcomes

Students will understand and be able to deploy the analytical tools, modes of critical thinking, and types of writing that are used in studying languages and linguistics. Students will be able to analyze sets of data and make arguments concerning the theoretical analysis of those data.

Core areas:

- Phonetics: Students will understand the acoustic and articulatory properties of speech sounds both for English and for other languages. Students will be able to transcribe and read the International Phonetic Alphabet.
- Phonology: Students will display knowledge of phonological analysis including identifying phonemes and allophones in languages, writing phonological rules using distinctive features, and understanding phonological processes such as assimilation, epenthesis, vowel harmony, etc.
- Morphology: Students will be able to analyze word structure (inflection, derivation, compounding) both in English and in unfamiliar languages. They will understand key concepts concerning the mental lexicon.
- Syntax: Students will be able to analyze the structural properties of sentences in English and in other languages and be familiar with the principles of generative grammar.
- Sociolinguistics, Historical Linguistics, and Typology: Students will understand processes of language change over time, language variation according to region, social class, gender, and education, and the effects of language contact.
- Field Methods: Students will be able to work with a native speaker of an unfamiliar language to collect and analyze data from that language. They will understand the ethical and logistical issues involved in documenting languages.
- Applications: Students will have an understanding of practical applications of linguistic knowledge to daily life, including political issues regarding language (e.g., bilingual education, official languages), language acquisition, disorders that can affect language.

Linguistics Minor

https://www.unh.edu/program/minor/linguistics

Description

Linguistics is the study of one of the most important characteristics of human beings—language. It cuts across the boundaries between the sciences and the humanities. Students interested in the minor should consult with Prof. Rachel Burdin, rachel.burdin@unh.edu (603) 862-1088, the program coordinator, or with any professor who teaches linguistics courses.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Course		
ENGL 405	Introduction to Linguistics	4
or LING 405	Introduction to Linguistics	
Electives		
Select four (4) courses from the following:		16
CMN 666	Conversation Analysis	
ENGL 603	Phonetics	
ENGL 604	Phonology	
ENGL 605	Intermediate Linguistic Analysis	
ENGL 606	Languages of the World	
ENGL 607	Syntax	
ENGL 608	Semantics	
ENGL 715	Teaching English as a Second Language: Theory and Methods	
ENGL 716	Curriculum, Materials and Assessment in English as a Second Language	
ENGL 718	Morphology	
ENGL 719	Sociolinguistics Survey	
ENGL 727	Issues in Second Language and Multilingual Literacy	
ENGL 728	Language and Gender	
ENGL 752	History of the English Language	
ENGL 779	Linguistic Field Methods	
ENGL 790	Special Topics in Linguistics	
ENGL 791	English Grammar	
ENGL 793	Phonetics and Phonology	
ENGL 794	Syntax	
LING 603	Phonetics	
LING 604	Phonology	
LING 605	Intermediate Linguistic Analysis	
LING 606	Languages of the World	
LING 607	Syntax	
LING 608	Semantics	
LING 718	Morphology	
LING 719	Sociolinguistics Survey	
LING 728	Language and Gender	
LING 779	Linguistic Field Methods	
LING 790	Special Topics in Linguistics Theory	
LING 793	Phonetics and Phonology	
LING 794	Syntax	
LLC 791	Methods of Foreign Language Teaching	
PSYC 512	Psychology of Primates	
PSYC 513	Cognitive Psychology	
PSYC 712W	Psychology of Language	
RUSS 733	History of Slavic Languages and Culture	

SPAN 641	Spanish Language Variation & Change	
SPAN 645	Intro to Spanish Linguistics	
Total Credits		**20**

TESOL Minor

https://www.unh.edu/program/minor/tesol

Description

The TESOL minor is a set of courses that are related to teaching English to speakers of other languages. This minor primarily is for students who are interested in teaching English to speakers of other languages, whether that be teaching English abroad or teaching ESL students in U.S. public schools (K-12). It is also appropriate for students who are going into social work or other professions that require regular interaction with nonnative English speakers.

The TESOL minor will not certify students to teach in New Hampshire public schools (K-12). For that purpose, students must complete the ESL certification program that is offered at the graduate level by the Education and English departments. However, the coursework in this minor will provide a very good foundation for students who want to later pursue ESL certification or an M.A. in TESOL at UNH or another institution.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
ENGL 715	Teaching English as a Second Language: Theory and Methods	4
ENGL 716	Curriculum, Materials and Assessment in English as a Second Language	4
Select one of the following courses on the structure of English:		4
ENGL 791	English Grammar	
ENGL/LING 405	Introduction to Linguistics	
Select two of the following approved TESOL electives:		8
EDUC 550	Language and Linguistic Diversity in Schools	
ENGL 791	English Grammar [1]	
ENGL/LING 405	Introduction to Linguistics [1]	
ENGL/LING 719	Sociolinguistics Survey	
ENGL 752	History of the English Language (WI)	
ENGL/LING 790	Special Topics in Linguistics (when offered on a TESOL-related topic (WI))	
LLC 791	Methods of Foreign Language Teaching	
Special topics courses that are related to TESOL [2]		
Total Credits		**20**

1 Whichever was not taken before

2 The TESOL coordinator can provide you with a list of available courses for a particular semester.

Medical Humanities, Society & Ethics

- Medical Humanities, Society & Ethics Minor (p. 294)

Medical Humanities, Society & Ethics Minor

https://www.unh.edu/program/minor/medical-humanities-society-ethics

Description

As an interdisciplinary minor, medical humanities, society and ethics (MHSE) teaches students to use methods from the humanities and social sciences to examine issues related to illness, health, healthcare, the body and the mind in their social, cultural and historical contexts.

MHSE takes as its starting point the dual claim that the central human experiences of health and illness as well as the systems of knowledge that have emerged to classify them are culturally shaped phenomena. Bodies and minds experience illness; people suffer; they age; they die. But the meanings people attach to these processes are not givens in the natural world. They are rather forged within a particular society's attitudes, values, beliefs and practices expressed through language, behavior, ritual and art. They are, moreover, contingent on time and place. Even the modern scientific discipline of medicine, its truth claims, and its terms are embedded in historical cultural domains. They have as much to do with attitudes to gender, race, socioeconomic status, relations of power, structures of authority and social hierarchies as they do with biology.

MHSE aims to bridge the gulf that exists between science and experience, biology and culture by challenging students to examine critically the origins and nature of their beliefs and values about illness and health as well as the beliefs and values embedded in their society's social, cultural, educational, legal and political institutions.

MHSE students will learn that humanistic interpretive practices make cross-cultural and comparative studies of health and illness possible. The minor encourages students to take a broad community and global perspective on experiences of health and illness that address equity, policy and resource allocation.

Requirements

Academic policies related to Minors.

Students are required to take five courses (20 credits) selected from the approved list of courses below. Other courses may be taken that are approved by the minor advisory committee through a petition process. Independent studies, practica and transfer credits may also count for the minor with the approval of the committee.

- At least 4 credits must be at the 600 or 700-level.
- No more than 12 credits may be taken from the same department.
- At least 12 credits must be taken in residence at UNH.
- No more than 4 credits may be taken from courses outside of the College of Liberal Arts.
- Students must receive a grade of C- or better for courses to count toward the minor requirements.
- Once students have declared the minor, they are required to meet with the coordinator or appropriate core faculty advisor at least once per year for regular review and assessment of their program, learning outcomes and progress.

Code	Title	Credits
Approved Courses		
ANTH 525	Anthropology of the Body: Fat, Fitness and Form	4
ANTH 610	Medical Anthropology: Illness and Healing	4
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa	4
CLAS 550C	Identities and Difference in the Ancient World: Sex and Desire in Greece and Rome	4

ENGL 415C	Literature and Medicine	4
ENGL 787	English Major Seminar (Only topic: Literature and Medicine)	4
GERM 798	Special Studies in German Language and Literature (Only topic: Narrating Madness in German Literature)	4
HIST 437H	Honors/The Mad Among Us: A Global History of Mental Disorder	4
HIST 498	Explorations of Historical Perspectives (Only topics: Pandemic! From the Black Death to Coronavirus or Childhood in Global History)	4
HIST 500	Introduction to Historical Thinking (Only topic: Landscape, Environment and Disease)	4
HUMA 526	Humanities and Science (Only topics: The Undead Humanities and Cognitive Science of Religion)	4
PHIL 410	Happiness, Well-Being , and a Good Life	4
PHIL 424	The Future of Humanity: Science, Technology, and Society	4
PHIL 440B	Honors/Who's Human Now?	4
PHIL 447	A.I., Robots, and People	4
PHIL 630	Neuroscience and Philosophy	4
PHIL 660	Law, Medicine, and Ethics	4
PHP 908	Public Health Ethics (undergrads allowed with special permission)	3
PSYC 531	Psychobiology	4
PSYC 733	Drugs and Behavior	4
PSYC 736	Attention Disorders	4
SOC 570	Sexual Behavior	4
SOC 620	Drugs and Society	4
SOC 625	Mental Health and Society	4
SOC 635W	Medical Sociology	4
SOC 788		4

Middle Eastern Studies

Programs

- Middle Eastern Studies Minor (p. 295)

Middle Eastern Studies Minor

https://www.unh.edu/program/minor/middle-eastern-studies

Description

The minor in Middle Eastern studies introduces students to the many facets of Middle Eastern cultures and societies through the interdisciplinary study of languages, history, politics, geography, and anthropology. Minor coursework enables students' understanding of the Middle East as a dynamic region in a global and comparative context. This minor therefore encompasses not only the study of the region itself, but also the flows and circulation of migration, diasporas, refugees, ideas, literatures, social movements, war and natural resources that make the region pivotal to world history and the global economy. In addition, participation in the minor prepares students for study abroad experiences, helps them acquire skills and qualifications for graduate study, and enhances employment opportunities.

Students interested in the minor should contact the coordinator and/or affiliated faculty to discuss their program of study.

Requirements

Academic policies related to Minors.

The Middle Eastern Studies minor requires five courses (20 credits) selected from the list of approved elective courses or from exceptional courses and opportunities approved by the affiliate faculty in respective disciplines. The five-course requirement must include one non-language course.

Code	Title	Credits
Required Courses		
Select five courses from the following:		20
ANTH 500	Peoples and Cultures of the World (Topic C)	
ANTH 640	Anthropology of Islam: Muslims' Everyday Lives in Contemporary Communities	
ANTH 700	Internship (A: Preserving Cultural Heritage in Syria and Iraq)	
ARBC 401	Elementary Arabic I	
ARBC 402	Elementary Arabic II	
ARBC 425	Introduction to Arabic Culture	
ARBC 503	Intermediate Arabic	
ARBC 504	Intermediate Arabic	
ARBC 631	Advanced Arabic I	
ARBC 632	Advanced Arabic II	
HIST 425	Foreign Cultures (if related to Middle East)	
HIST 571	Modern Middle East History (Modern Middle East History)	
HIST 575	Ancient Near East	
HIST 585	Medieval Islam	
HUMA 444F	Travelers in the Premodern World	
POLT 559	Comparative Politics of the Middle East	
POLT 740	States and Societies in the Middle East	
Total Credits		**20**

Additional Information

Foreign Language Study

The study of a Middle Eastern language or language relevant to Middle Eastern studies is strongly encouraged but not required. Students are encouraged and permitted to count Arabic toward the five-course requirement. Students who have studied Hebrew, Turkish, Farsi, or other Middle Eastern languages at other institutions may apply for transfer of their credit toward the minor. Through petition to the minor coordinator and with support of affiliate faculty in the respective discipline, students may apply for European languages, such as French and Italian, to count toward minor requirements, provided these are relevant to their research and study interests in the region.

Music (MUSI, MUED)

The Department of Music offers two degree programs: the bachelor of arts in music and the bachelor of music.

The University of New Hampshire Department of Music is an accredited institutional member of the National Association of Schools of Music. All programs have final approval from NASM.

Prospective majors in music are advised to contact the department for information on acceptance into the major.

All music students must earn grades of C- or better in all required music and music education courses. The required minimum overall GPA in required music and music education coursework is 2.0.

Bachelor of Arts in Music

The bachelor of arts in music program offers students an opportunity to major in music within the liberal arts curriculum. This program is intended for those who wish to pursue the serious study of music and to acquire at the same time a broad general education; it is recommended for those considering graduate study leading to master's or doctoral degrees.

To be admitted formally to the B.A. program, students must give evidence of satisfactory musical training by taking an admission audition.

Students must declare music as a major before the beginning of the junior year, but it is highly recommended that they declare as early as possible, considering the large number of required courses.

The bachelor of arts degree is offered with three options: music liberal studies, performance study and composition.

Bachelor of Music Degree Program

The bachelor of music degree program is offered to students who wish to develop their talent in performance, composition or music education to a high professional level. The program is recommended to those considering graduate study leading to the M.M. or D.M.A. degrees. The music education option is part of the undergraduate certification program (see the Department of Education).

To be admitted to the B.M. program, students must demonstrate a high degree of musical competence or significant creative ability during an audition or examination. Selection is made on the professional requirements appropriate to each option. Students must formally declare the B.M. as a degree program before the beginning of the sophomore year. Continuation into the upper level of the program is subject to review by the department faculty.

Four degrees are offered in the bachelor of music curriculum: bachelor of music in music education; bachelor of music in performance; bachelor of music in composition, and bachelor of music pre-teaching.

https://cola.unh.edu/music

Programs

- Music Education Major (B.M.) (p. 296)
- Music Major: Composition Option (B.A.) (p. 300)
- Music Major: Music Liberal Studies Option (B.A.) (p. 302)
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- Music Performance Study Major (B.M.) (p. 308)
- Pre-Teaching Major (B.M.) (p. 311)

Faculty

Music Department Faculty

Music Education Major (B.M.)

https://www.unh.edu/program/bachelor-music/music-education

Description

The B.M. music education is the traditional program of choice for students seeking a career as a school music teacher. The bachelor of music degree in music education provides a route to undergraduate certification leading to state of New Hampshire teacher licensure in music, grades K-12 (cert. #612.13). New Hampshire also participates in a reciprocal agreement with many other states: the Interstate Certification Compact.

Successful applicants must demonstrate a high degree of musical competence and promise of future growth as a performer. A firm commitment to leading school musicians to artistic success is expected, as is a willingness to acquire the breadth of skills required for K-12 music licensure. Continuation in the B.M. music education program is made with the recommendation of the appropriate faculty members and contingent upon personal commitment to the teacher licensure program.

Students interested in a five-year, bachelor/masters degree program typically complete the B.M pre-teaching major as an undergraduate and apply to the UNH Department of Education for admission to the Master of Arts in Teaching (Secondary Education) degree program.

The four-year bachelor of music in music education curriculum is highly structured due to the number of required courses to complete. The requirements include a list of additional classes required to earn a degree and licensure to teach. Students may elect a vocal/choral or instrumental emphasis.

Requirements

Degree Requirements

Minimum Credit Requirement: 131 credits (Instrumental Track) or 132 credits (Choral Track)

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students in music education must maintain an overall minimum 2.8 grade-point average at the time of application for student teaching (February 15 of junior year). Any education courses taken to fulfill a teacher licensure requirement must be completed with a B- or better.

Discovery Program Requirements: B.M. music education majors may use MUSI 501 The Western Musical Canon (a required core course for the major) to satisfy the Fine and Performing Arts Discovery category requirement. In addition, they may use MUSI 502 Musics in Context (a required core course for the major) to satisfy the Inquiry Discovery category requirement, and MUSI 515 Music in World Cultures (a required core course for the major) to satisfy the World Cultures Discovery category requirement.

All bachelor of music students are required to give a public performance during their senior year, which fulfills the Discovery Program capstone requirement.

For students in the music education option, a half recital is required.

Music requirements must receive a grade of C- or better. Education courses require a minimum grade of B- or better to receive credit.

Code	Title	Credits
Core Curriculum		
MUSI 471 & MUSI 472	Theory I and Theory I	6
MUSI 473 & MUSI 474	Ear Training I and Ear Training I	2

MUSI 475 & MUSI 476	Functional Piano I and Functional Piano I [1]	2
MUSI 571 & MUSI 572	Theory II and Theory II	6
MUSI 573 & MUSI 574	Ear Training II and Ear Training II	2
MUSI 575 & MUSI 576	Functional Piano II and Functional Piano II [1]	2
MUSI 501 & MUSI 502	The Western Musical Canon and Musics in Context	6
MUSI 515	Music in World Cultures	4
MUSI 540	Recital Attendance	0
MUSI 731	Conducting	2
Advanced Music History		3
MUSI 701	Topics in Music History	
Performance Study (Applied Lessons): select from the following courses		Variable
MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performing Ensemble: select from the following courses		Variable
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
Total Credits		**35**

1 Students will be given the opportunity to test out of MUSI 471 Theory I, MUSI 475 Functional Piano I, MUSI 476 Functional Piano I and MUSI 575 Functional Piano II, MUSI 576 Functional Piano II.

Bachelor of Music in Music Education Curriculum

Degree program has final approval from the National Association of Schools of Music.

Code	Title	Credits
MUED 741	Techniques and Methods in Choral Music	2
MUED 745	Techniques and Methods in String Instruments	2
MUED 747	Techniques and Methods in Woodwind Instruments [1]	2-3
MUED 749	Techniques and Methods in Brass Instruments	2
MUED 751	Techniques and Methods in Percussion Instruments	2
MUED 755	Vocal Pedagogy [2]	2
MUED 765	Instrumental Music Methods [3]	2
MUED 790	Teaching Elementary School Music	3
MUED 791	Teaching Secondary School Music	2
MUSI 520	Diction for Singers I [4]	2
MUSI 732	Conducting	2
MUSI 779	Reading and Writing Musical Scores	3
Performance Study (Applied Lessons): select from the following courses		8
MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performing Ensemble: select from the following courses [5, 6, 7]		8
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
EDUC 500	Exploring Teaching	4
EDUC 605	Educational Perspectives in Critical Times	4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
EDUC 751B	Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	4
EDUC 694	Courses in Supervised Teaching	8
Total Credits		**66-67**

1 Vocal track students take 2 credits. Instrumental track students take 3 credits.

2 Required for Vocal track.

3 Required for Instrumental track.

4 Required for Vocal track.

5 Students in the Bachelor of Music Education program are required to complete 8 credits of ensemble; a maximum of 8 ensemble credits may be counted towards graduation. Students will enroll in one conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony,MUSI 453 Symphonic Band, MUSI 441 Concert Choir, MUSI 442 Chamber Singers, MUSI 460 Jazz Band, MUSI 454 UNH Marching Band) in every semester of their enrollment at UNH except for their student-teaching semester. To compensate, they will enroll in two ensembles during a previous semester.
6 of these required ensembles must be on the student's primary instrument and 4 credits must be in a traditional conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony, MUSI 453 Symphonic Band, MUSI 441 Concert Choir). For instrumentalists, at least 1 semester of participation in MUSI 454 UNH Marching Band) and MUSI 460 Jazz Band are highly desirable.

6 Guitar music education majors will take four semesters of MUSI 464 Guitar Ensemble and four semesters of a traditional conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony, MUSI 453 Symphonic Band, MUSI 441 Concert Choir). Therefore, guitarists have a minimum of only 4 semesters required on their primary instrument.

7 Piano music education majors will take four semesters of MUSI 455 Collaborative Piano and four semesters of a traditional conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony, MUSI 453 Symphonic Band, MUSI 441 Concert Choir). Therefore, pianists have a minimum of only 4 semesters required on their primary instrument.

Junior Standing in Music Education

Recognition of adequate completion of fundamental academic and musical competencies shall earn students declared for the Bachelor of Music: Music Education the title Junior Standing. Students will not receive permission to register for the upper-level music education methods courses (MUED 765, MUED 790, MUED 791) without such recognition. Two of the steps required for recognition are the submission of passing scores on the PRAXIS: Core Academic Skills for Educators tests (scores will be sent directly to the Department of Education) and clearance of the Criminal Background Check as conducted by the State of New Hampshire Department of Safety. Results will be sent directly to the music education coordinator in the Department of Music. There is a charge for each of these steps assessed by the providers. Current students may follow the catalog corresponding to their matriculation year or follow the proposed changes.

Junior Standing Requirements

1. Criminal Background Check
2. Academic Standing
   a. 2.8 overall grade point average
   b. Pass PRAXIS Core Academic Skills for Educators Test
3. Aural Skills: Complete MUSI 574 Ear Training II with a grade of C- or better and a departmental followup assessment
4. Music Performance Skills
   a. Pass Sophomore Performance Jury with a grade of C- or better
   b. Perform for at least 3 semesters as a regular member of at least one of the designated core ensembles
   c. Complete MUSI 576 Functional Piano II with a C- or better and a departmental followup assessment
5. Complete EDUC 500 Exploring Teaching and a departmental followup assessment

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

Music Education: Choral

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
MUSI 501	The Western Musical Canon	3
MUSI 471	Theory I	3
MUSI 473	Ear Training I	1
MUSI 475	Functional Piano I	1
MUED 745	Techniques and Methods in String Instruments	2
500 Level Lesson		1
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**16**
Spring		
MUSI 515	Music in World Cultures	4
MUSI 520	Diction for Singers I	2
MUSI 472	Theory I	3
MUSI 474	Ear Training I	1
MUSI 476	Functional Piano I	1
MUED 751	Techniques and Methods in Percussion Instruments	2
500 Level Lesson		1
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Second Year		
Fall		
Discovery/QR		4
EDUC 500	Exploring Teaching	4
MUSI 571	Theory II	3
MUSI 573	Ear Training II	1
MUSI 575	Functional Piano II	1
MUED 747	Techniques and Methods in Woodwind Instruments	2
500 Level Lesson		1
Performing Ensembles [1]		2
MUSI 540	Recital Attendance	0
	Credits	**18**
Spring		
MUSI 502	Musics in Context	3
MUED 755	Vocal Pedagogy	2
MUSI 572	Theory II	3
MUSI 574	Ear Training II	1
MUSI 576	Functional Piano II	1
MUED 749	Techniques and Methods in Brass Instruments	2
MUSI 731	Conducting	2
500 Level Lesson		1
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**16**
Third Year		
Fall		
Discovery Course		4
Discovery Course		4
EDUC 605	Educational Perspectives in Critical Times	4
MUSI 732	Conducting	2
MUSI 779	Reading and Writing Musical Scores	3
700 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**19**
Spring		
Discovery Course		4
Discovery Course		4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
MUED 790	Teaching Elementary School Music	3
MUSI 701	Topics in Music History	3
700 Level Lesson		1
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**20**
Fourth Year		
Fall		
Discovery Course		4
Discovery Course		4
MUED 741	Techniques and Methods in Choral Music	2
MUED 791	Teaching Secondary School Music	2
700 Level Lesson		1
Performing Ensemble [1]		1
	Credits	**14**
Spring		
EDUC 694	Courses in Supervised Teaching [2]	8
EDUC 751A or EDUC 751B	Inclusive Elementary Education: Literacies and Learning for Diverse Learners or Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	4
	Credits	**12**
	Total Credits	**130**

Music Education: Instrumental

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
MUSI 501	The Western Musical Canon	3

MUSI 471	Theory I	3
MUSI 473	Ear Training I	1
MUSI 475	Functional Piano I	1
MUED 745	Techniques and Methods in String Instruments	2
500 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**16**
Spring		
Discovery/QR		4
MUSI 515	Music in World Cultures	4
MUSI 472	Theory I	3
MUSI 474	Ear Training I	1
MUSI 476	Functional Piano I	1
MUED 751	Techniques and Methods in Percussion Instruments	2
500 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**17**
Second Year		
Fall		
Discovery Course		4
EDUC 500	Exploring Teaching	4
MUSI 571	Theory II	3
MUSI 573	Ear Training II	1
MUSI 575	Functional Piano II	1
MUED 747	Techniques and Methods in Woodwind Instruments	3
500 Level Lesson		1
Performance Ensembles [1]		2
MUSI 540	Recital Attendance	0
	Credits	**19**
Spring		
Discovery Course		4
MUSI 502	Musics in Context	3
MUSI 572	Theory II	3
MUSI 574	Ear Training II	1
MUSI 576	Functional Piano II	1
MUED 749	Techniques and Methods in Brass Instruments	2
MUSI 731	Conducting	2
500 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**18**
Third Year		
Fall		
Discovery Course		4
EDUC 605	Educational Perspectives in Critical Times	4
MUSI 732	Conducting	2
MUSI 779	Reading and Writing Musical Scores	3
700 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Spring		
Discovery Course		4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
MUED 765	Instrumental Music Methods	2
MUED 790	Teaching Elementary School Music	3
MUSI 701	Topics in Music History	3
700 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**18**
Fourth Year		
Fall		
Discovery Course		4
Discovery Course		4
MUED 741	Techniques and Methods in Choral Music	2
MUED 791	Teaching Secondary School Music	2
700 Level Lesson		2
Performance Ensemble [1]		1
	Credits	**15**
Spring		
EDUC 694	Courses in Supervised Teaching [2]	8
EDUC 751A or EDUC 751B	Inclusive Elementary Education: Literacies and Learning for Diverse Learners or Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	4
	Credits	**12**
	Total Credits	**130**

[1] Performing Ensembles are specified in the catalog.

[2] PRAXIS II: Music Content Knowledge #5113 is required before EDUC 694 Student Teaching

Student Learning Outcomes

Program Learning Outcomes

- Students will exhibit the skills necessary for artistic expression at the highest possible level as defined by their particular area of concentration in solo and small ensemble (not conducted) and large ensemble (conducted) settings.
- Students will exhibit competency in musicianship and analysis through: their understanding of musical forms and processes; aural, verbal and visual analyses; skill in performance; academic, pedagogical, and compositional applications; rudimentary ability to create derivative or original music.
- Students will demonstrate familiarity with musical literature from the formal concert repertory and from musical traditions outside of

that repertory. Students will demonstrate the ability to place music in historical, cultural, and stylistic contexts.

- Students will demonstrate collegiate-level skill in the English language and competence in written and oral communication in English.
- Demonstrate the ability to use technologies current to their area of specialization for professional development and entrepreneurship, and career preparation and promotion.
- Students demonstrate ability to lead students to increased musical knowledge and advancing musical performance.
- Students demonstrate knowledge of age-appropriate vocal and instrumental pedagogy.
- Students demonstrate an understanding of best practices and applicable learning theories in music education.
- Students demonstrate the ability to prepare classes and rehearsals via score study and lesson planning that includes awareness of needed modifications.
- Students aurally discern accuracy and expressive elements in student performances.
- Students demonstrate the ability to assess their pupils' learning and progress in conjunction with best educational practices.
- Students are able to assess the success of their own class teaching and rehearsals.

Disclosures

Music Education (B.M.)

Location/Delivery: College of Liberal Arts, Durham Campus [In Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Music Education K-12

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Music Major: Composition Option (B.A.)

https://www.unh.edu/program/bachelor-arts/music-composition

Description

If you want to develop your skills as a composer while also pursuing a broad liberal arts education, the Bachelor of Arts in music with an option in composition is the degree you should pursue. You'll study music theory and analysis, the history and literature of music, and world music and technical skills such as ear training and piano as you grow as a composer and performer.

Students wanting to declare composition as their option must submit a music portfolio in addition to an audition on their major instrument.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The Discovery Program capstone requirement is fulfilled by a final project or a public performance given during the senior year. For students in the composition option, there is a choice of completing a half lecture, half lecture-recital or a half recital including at least one original composition.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Major department courses may not be used to satisfy Discovery category requirements except in the case of a second major. B.A. in music majors may use MUSI 502 Musics in Context (a required core course for the major) to satisfy the Inquiry Discovery requirement.

Music requirements must receive a grade of C- or better.

Code	Title	Credits
Core Curriculum		
MUSI 471 & MUSI 472	Theory I and Theory I	6
MUSI 473 & MUSI 474	Ear Training I and Ear Training I	2
MUSI 475 & MUSI 476	Functional Piano I and Functional Piano I [1]	2
MUSI 571 & MUSI 572	Theory II and Theory II	6
MUSI 573 & MUSI 574	Ear Training II and Ear Training II	2
MUSI 575 & MUSI 576	Functional Piano II and Functional Piano II [1]	2
MUSI 501 & MUSI 502	The Western Musical Canon and Musics in Context	6
MUSI 515	Music in World Cultures	4
MUSI 540	Recital Attendance	0
Advanced Music History		3

MUSI 701	Topics in Music History	
Advanced Music Theory		3
MUSI 781W	Analysis: Form and Structure	
Performance Study (Applied Lessons): select from the following courses		
MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performing Ensemble: select variable credits from the following courses [2]		
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
Total Credits		**36**

1 Students will be given the opportunity to test out of MUSI 471 Theory I, MUSI 475 Functional Piano I, MUSI 476 Functional Piano I and MUSI 575 Functional Piano II, MUSI 576 Functional Piano II.

2 A maximum of 8 ensemble credits may count toward graduation for all bachelor of arts in music students.

Music Composition Option Requirements

Degree program has final approval from the National Association of Schools of Music.

Code	Title	Credits
Select 6 credits of Advanced Music Theory from the following:		6
MUSI 779	Reading and Writing Musical Scores	
MUSI 781W	Analysis: Form and Structure	
Select 8 credits of the following:		8
MUSI 775	Composition	
MUSI 776	Composition	
MUSI 777	Advanced Composition	
MUSI 731	Conducting	
Performance Study (Applied Lessons): select from the following courses		4
MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performing Ensemble: select from the following courses		8
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
Total Credits		**26**

Students in the composition option, if not in a lesson studio, will attend composition seminar.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
MUSI 501	The Western Musical Canon	3
MUSI 471	Theory I	3
MUSI 473	Ear Training I	1
MUSI 475	Functional Piano I	1
500 Level Lesson		1
Composition Seminar		0
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**14**
Spring		
Discovery/QR		4
MUSI 515	Music in World Cultures	4
MUSI 472	Theory I	3
MUSI 474	Ear Training I	1
MUSI 476	Functional Piano I	1
500 Level Lesson		1
Composition Seminar		0
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Second Year		
Fall		
Discovery Course		4
Discovery Course		4
Foreign Language 401 [1]		4
MUSI 571	Theory II	3
MUSI 573	Ear Training II	1
MUSI 575	Functional Piano II	1
500 Level Lesson		1
Composition Seminar		0
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**19**
Spring		
Discovery Course		4
MUSI 502	Musics in Context	3
Foreign Language 402 [1]		4
MUSI 572	Theory II	3
MUSI 574	Ear Training II	1
MUSI 576	Functional Piano II	1
500 Level Lesson		1
Composition Seminar		0
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**18**
Third Year		
Fall		
Discovery Course		4
Discovery Course		4
MUSI 779	Reading and Writing Musical Scores	3
MUSI 781W	Analysis: Form and Structure (fall or spring)	3
MUSI 775	Composition	1
Composition Seminar		0
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**16**
Spring		
Discovery Course		4

Free Elective		4
MUSI 731	Conducting	2
MUSI 781W	Analysis: Form and Structure (fall or spring)	3
MUSI 776	Composition	1
Composition Seminar		0
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Fourth Year		
Fall		
Discovery Course		4
Discovery Course		4
Free Elective		2
MUSI 701	Topics in Music History	3
MUSI 777	Advanced Composition	2
Composition Seminar		0
Performing Ensemble		1
	Credits	**16**
Spring		
Free Elective		4
Free Elective		4
Free Elective		4
MUSI 777	Advanced Composition	2
Composition Seminar		0
Performing Ensemble [2]		1
	Credits	**15**
	Total Credits	**128**

[1] The BA degree has a language requirement.

[2] Performing Ensembles are specified in the catalog.

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate the ability to perform a specialization instrument or voice at an appropriate solo level and/or in small ensemble and large ensemble.
- Aurally identify, analyze, and work conceptually with the elements of music in a variety of musical styles.
- Students will demonstrate familiarity with musical literature from the formal concert repertory and from musical traditions outside of that repertory.
- Demonstrate the ability to develop and defend musical judgments in writing and in oral presentation.
- Demonstrate collegiate-level skills in the English language, competence in written and oral communication in English, and fluency in communicating and synthesizing musical, historical and analytical concepts in writing.
- Demonstrate the ability to create substantial original compositions for solo instrument(s), chamber ensemble, or large ensemble.
- Present at least one substantial original composition in performance of a lecture, lecture-recital, or recital.

Music Major: Music Liberal Studies Option (B.A.)

https://www.unh.edu/program/bachelor-arts/music-music-liberal-studies

Description

Students enrolling in the B.A. music liberal studies program — a program that stresses the development of skills in analysis, writing and critical thinking about a wide variety of musics and the larger connection with history, culture and society — are required to submit a writing sample and interview with one of the music liberal studies program faculty members. The writing sample should be non-fiction, preferably an assignment for a course in English, history or a similar subject, 500 words or more in length.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The Discovery Program capstone requirement is fulfilled by a final project or a public performance given during the senior year. For students in the music liberal studies option, there is a choice of completing a half recital or comparable final project.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Major department courses may not be used to satisfy Discovery category requirements except in the case of a second major. B.A. in music majors may use MUSI 502 Musics in Context (a required core course for the major) to satisfy the Inquiry Discovery requirement.

Music requirements must receive a grade of C- or better.

Code	Title	Credits
Core Curriculum		
MUSI 471 & MUSI 472	Theory I and Theory I	6
MUSI 473 & MUSI 474	Ear Training I and Ear Training I	2
MUSI 475 & MUSI 476	Functional Piano I and Functional Piano I [1]	2
MUSI 571 & MUSI 572	Theory II and Theory II	6

MUSI 573 & MUSI 574	Ear Training II and Ear Training II	2
MUSI 575 & MUSI 576	Functional Piano II and Functional Piano II [1]	2
MUSI 501 & MUSI 502	The Western Musical Canon and Musics in Context	6
MUSI 515	Music in World Cultures	4
MUSI 540	Recital Attendance	0
Advanced Music History		3
MUSI 701	Topics in Music History	
Advanced Music Theory		3
MUSI 781W	Analysis: Form and Structure	
or MUSI 779	Reading and Writing Musical Scores	
Performance Study (Applied Lessons): select from the following courses		
MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performing Ensemble: select variable credits from the following courses [2]		
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
Total Credits		**36**

1. Students will be given the opportunity to test out of MUSI 471 Theory I, MUSI 475 Functional Piano I, MUSI 476 Functional Piano I and MUSI 575 Functional Piano II, MUSI 576 Functional Piano II.
2. A maximum of 8 ensemble credits may count toward graduation for all bachelor of arts in music students.

Music Liberal Studies Option Requirements

Degree program has final approval from the National Association of Schools of Music.

Code	Title	Credits
Select 6 credits of the following: [1]		6
MUSI 775	Composition	
MUSI 776	Composition	
MUSI 777	Advanced Composition	
MUSI 779	Reading and Writing Musical Scores	
MUSI 781W	Analysis: Form and Structure	
MUSI 701	Topics in Music History [3]	
Performance Study/Ensemble: select 8 credits of the following: [2]		8
Performance Study courses:		
MUSI 540, MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performance Ensemble courses:		
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
Total Credits		**14**

1. Any combination of advanced theory and history (6 credits) in addition to the core curriculum.
2. Any combination of performance and/or ensemble study (8 credits total).
3. MUSI 701 Topics in Music History is a rotational topics course and can be repeated.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
Foreign Language 401 [1]		4
MUSI 501	The Western Musical Canon	3
MUSI 471	Theory I	3
MUSI 473	Ear Training I	1
MUSI 475	Functional Piano I	1
Lesson or Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**17**
Spring		
MUSI 515	Music in World Cultures	4
Foreign Language 402 [1]		4
MUSI 472	Theory I	3
MUSI 474	Ear Training I	1
MUSI 476	Functional Piano I	1
Lesson or Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**14**
Second Year		
Fall		
Discovery/QR		4
Discovery Course		4
MUSI 571	Theory II	3
MUSI 573	Ear Training II	1
MUSI 575	Functional Piano II	1
Lesson or Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**14**
Spring		
Discovery Course		4
Discovery Course		4
MUSI 502	Musics in Context	3
MUSI 572	Theory II	3
MUSI 574	Ear Training II	1
MUSI 576	Functional Piano II	1
Lesson or Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**17**
Third Year		
Fall		
Discovery Course		4
Discovery Course		4
Free Elective		4

MUSI 701	Topics in Music History (or a Free Elective)	3
MUSI 781W or MUSI 779	Analysis: Form and Structure or Reading and Writing Musical Scores	3
Lesson or Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**19**
Spring		
Discovery Course		4
Discovery Course		4
MUSI 701	Topics in Music History (or an upper-level theory course)	3
Free Elective		3
Lesson or Ensemble		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Fourth Year		
Fall		
Discovery Course		4
Free Elective		4
Free Elective		4
Advanced Music History or Theory		3
Lesson or Ensemble [2]		1
	Credits	**16**
Spring		
Free Elective		4
Free Elective		4
Free Elective		4
Advanced Music History or Theory		3
Lesson or Ensemble [2]		1
	Credits	**16**
	Total Credits	**128**

[1] The BA degree has a language requirement.

[2] Any combination of lessons and ensembles fulfills the requirement.

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate the ability to perform a specialization instrument or voice at an appropriate solo level and/or in small ensemble and large ensemble.
- Aurally identify, analyze, and work conceptually with the elements of music in a variety of musical styles.
- Students will demonstrate familiarity with musical literature from the formal concert repertory and from musical traditions outside of that repertory.
- Demonstrate the ability to develop and defend musical judgments in writing and in oral presentation.
- Demonstrate collegiate-level skills in the English language, competence in written and oral communication in English, and fluency in communicating and synthesizing musical, historical and analytical concepts in writing.
- Demonstrate the ability to conduct original research on music with faculty mentoring and independently.
- Demonstrate in writing the ability to integrate concepts from adjacent disciplines—history, aesthetics, sociology, cultural studies—with musical and stylistic analysis.

Music Major: Performance Study Option (B.A.)

https://www.unh.edu/program/bachelor-arts/music-performance-study

Description

The Bachelor of Arts in performance study degree is the program for you if you wish to develop your talent as a performer while also gaining a solid liberal arts education. You'll develop your musicianship through private study, chamber music and some of the best performing ensembles in the region. You'll be immersed in the study of music theory, history, literature and world music while sharpening your listening and performance skills. This program is recommended if you're considering graduate study leading to a master's or doctoral degree in music.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Degree program has final approval from the National Association of Schools of Music.

Major Requirements

The Discovery Program capstone requirement is fulfilled by a final project or a public performance given during the senior year. For students in the performance study option, a full recital is required.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Major department courses may not be used to satisfy Discovery category requirements except in the case of a second major. B.A. in music majors may use MUSI 502 Musics in Context (a required core course for the major) to satisfy the Inquiry Discovery requirement.

Music requirements must receive a grade of C- or better.

Code	Title	Credits
Core Curriculum		
MUSI 471 & MUSI 472	Theory I and Theory I	6

MUSI 473 & MUSI 474	Ear Training I and Ear Training I	2
MUSI 475 & MUSI 476	Functional Piano I and Functional Piano I [1]	2
MUSI 571 & MUSI 572	Theory II and Theory II	6
MUSI 573 & MUSI 574	Ear Training II and Ear Training II	2
MUSI 575 & MUSI 576	Functional Piano II and Functional Piano II [1]	2
MUSI 501 & MUSI 502	The Western Musical Canon and Musics in Context	6
MUSI 515	Music in World Cultures	4
MUSI 540	Recital Attendance	0
Advanced Music History		3
MUSI 701	Topics in Music History	
Advanced Music Theory		3
MUSI 781W	Analysis: Form and Structure	
or MUSI 779	Reading and Writing Musical Scores	
Performance Study (Applied Lessons): select from the following courses		
MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performing Ensemble: select variable credits from the following courses [2]		
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
Total Credits		**36**

1. Students will be given the opportunity to test out of MUSI 471 Theory I, MUSI 475 Functional Piano I, MUSI 476 Functional Piano I and MUSI 575 Functional Piano II, MUSI 576 Functional Piano II.
2. A maximum of 8 ensemble credits may count toward graduation for all bachelor of arts in music students.

Performance Study Option Requirements

Code	Title	Credits
Instrumental Performance Concentration		
MUSI 731	Conducting	2
Performance Study (Applied Lessons): select from the following courses [1]		
MUSI 541, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564		8
MUSI 741, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		8
Performing Ensemble: select from the following courses [1]		
MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		8
Total Credits		**26**

1. Students in the Bachelor of Arts Performance program in the instrumental track are required to complete 8 credits of ensemble; a maximum of 8 ensemble credits may be counted towards graduation. Students in this program are required to enroll in at least one ensemble in every semester of enrollment at UNH, at least 6 of which must be on their primary instrument.
   Further, instrumentalists specializing in woodwind, brass, string, or percussion instruments should enroll in one credit of a conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony,MUSI 453 Symphonic Band, MUSI 441 Concert Choir, MUSI 442 Chamber Singers, MUSI 460 Jazz Band, MUSI 454 UNH Marching Band) in every semester of enrollment.

Code	Title	Credits
Vocal Performance Concentration		
MUSI 731	Conducting	2
MUSI 520	Diction for Singers I	2
MUSI 521		
Performance Study (Applied Lessons) [1]		
MUSI 545	Voice	8
MUSI 745	Voice	8
Performing Ensemble: select from the following courses [2]		8
MUSI 441	Concert Choir	
MUSI 442	Chamber Singers	
MUSI 448	Vocal Arts Project	
Language Requirement:		8
FREN 401 & FREN 402	Elementary French I and Elementary French II	
or GERM 401 & GERM 402	Elementary German I and Elementary German II	
or ITAL 401 & ITAL 402	Elementary Italian I and Elementary Italian II	
Total Credits		**36**

1. 2 credits per semester
2. Students in the Bachelor of Arts Performance program in the vocal track are required to complete 8 credits of ensemble; a maximum of 8 ensemble credits may be counted towards graduation. Students in this program are required to enroll in at least one ensemble in every semester of enrollment at UNH, including at least 4 credits of MUSI 441 Concert Choir, with the remaining ensemble credits as indicated drawn from MUSI 441 Concert Choir, MUSI 442 Chamber Singers, and MUSI 448 Vocal Arts Project.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

Performance Study: Instrumental

First Year

Fall		**Credits**
ENGL 401	First-Year Writing	4
MUSI 501	The Western Musical Canon	3
MUSI 471	Theory I	3
MUSI 473	Ear Training I	1
MUSI 475	Functional Piano I	1
500 Level Lesson		2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Spring		
MUSI 515	Music in World Cultures	4
Discovery/QR		4
MUSI 472	Theory I	3
MUSI 474	Ear Training I	1
MUSI 476	Functional Piano I	1
500 Level Lesson		2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**16**

Second Year		
Fall		
Discovery Course		4
Foreign Language 401 [1]		4
MUSI 571	Theory II	3
MUSI 573	Ear Training II	1
MUSI 575	Functional Piano II	1
500 Level Lesson		2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**16**
Spring		
MUSI 502	Musics in Context	3
Foreign Language 402 [1]		4
MUSI 572	Theory II	3
MUSI 574	Ear Training II	1
MUSI 576	Functional Piano II	1
MUSI 731	Conducting	2
500 Level Lesson		2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**17**
Third Year		
Fall		
Discovery Course		4
Discovery Course		4
MUSI 701	Topics in Music History	3
MUSI 781W or MUSI 779	Analysis: Form and Structure (Fall or Spring) or Reading and Writing Musical Scores	
700 Level Lesson		2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**14**
Spring		
Discovery Course		4
Discovery Course		4
Free Elective		4
700 Level Lesson		2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Fourth Year		
Fall		
Discovery Course		4
Discovery Course		4
Discovery Course		4
700-Level Lesson		2
Performing Ensemble [2]		1
Free Elective (Fall or Spring)		3-4
	Credits	**18-19**
Spring		
Free Elective		4
Free Elective		4
Free Elective		4
Free Elective		2
700 Level Lesson		2
Performing Ensemble [2]		1
	Credits	**17**
	Total Credits	**128-129**

Performance Study: Vocal

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
MUSI 501	The Western Musical Canon	3
MUSI 471	Theory I	3
MUSI 473	Ear Training I	1
MUSI 475	Functional Piano I	1
MUSI 545	Voice	2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Spring		
MUSI 515	Music in World Cultures	4
MUSI 520	Diction for Singers I	2
MUSI 472	Theory I	3
MUSI 474	Ear Training I	1
MUSI 476	Functional Piano I	1
MUSI 545	Voice	2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**14**
Second Year		
Fall		
Discovery/QR		4
Foreign Language 401 [1]		4
MUSI 521		2
MUSI 571	Theory II	3
MUSI 573	Ear Training II	1
MUSI 575	Functional Piano II	1
MUSI 545	Voice	2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**18**
Spring		
MUSI 502	Musics in Context	3
Foreign Language 402 [1]		4
MUSI 731	Conducting	2
MUSI 572	Theory II	3
MUSI 574	Ear Training II	1
MUSI 576	Functional Piano II	1
MUSI 545	Voice	2

Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**17**
Third Year		
Fall		
Discovery Course		4
Discovery Course		4
MUSI 701	Topics in Music History	3
MUSI 781W or MUSI 779	Analysis: Form and Structure (Fall or Spring) or Reading and Writing Musical Scores	3
MUSI 745	Voice	2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**17**
Spring		
Discovery Course		4
Discovery Course		4
Free Elective		4
MUSI 745	Voice	2
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Fourth Year		
Fall		
Discovery Course		4
Discovery Course		4
Discovery Course		4
Free Elective		3
MUSI 745	Voice	2
Performing Ensemble [2]		1
	Credits	**18**
Spring		
Discovery Course		4
Free Elective		4
Free Elective		3
MUSI 745	Voice	2
Performing Ensemble [2]		1
	Credits	**14**
	Total Credits	**128**

[1] The BA degree has a language requirement

[2] Performing Ensembles are specified in the catalog.

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate the ability to perform a specialization instrument or voice at an appropriate solo level and/or in small ensemble and large ensemble.
- Aurally identify, analyze, and work conceptually with the elements of music in a variety of musical styles.
- Students will demonstrate familiarity with musical literature from the formal concert repertory and from musical traditions outside of that repertory.
- Demonstrate the ability to develop and defend musical judgments in writing and in oral presentation.
- Demonstrate collegiate-level skills in the English language, competence in written and oral communication in English, and fluency in communicating and synthesizing musical, historical and analytical concepts in writing.
- Demonstrate the ability to perform a specialization instrument or voice at the level of an advanced undergraduate student, or young professional, including a high level of technical and artistic competence, and to work independently in both solo practicing and small ensemble rehearsals.
- Demonstrate maturity in musical performance, using performance and liberal-arts tools and insights to create an artistic product.
- Students will plan, prepare, and perform a solo recital in collaboration with faculty and staff that includes both organizational elements and artistic preparation.

Music Minor

https://www.unh.edu/program/minor/music

Description

A music minor is a great option for students who are passionate about the discipline of music but choose to major in another field. The minor includes required coursework in music theory and literature.

Requirements

Academic policies related to Minors.

- The minor in Music consists of completing a minimum of 20 credits of coursework in music.

Code	Title	Credits
Required Courses		
MUSI 471 & MUSI 472 & MUSI 473 & MUSI 474	Theory I and Theory I and Ear Training I and Ear Training I	8
Select two courses from the following:		8
MUSI 401	Introduction to Music	
MUSI 403	Roots of Rock	
MUSI 404	An Introduction to Music, Media, and the Moving Image	
MUSI 405	Survey of Music in America	
MUSI 406	Country Music	
MUSI 444	Music and Social Change	
MUSI 501	The Western Musical Canon	
MUSI 502	Musics in Context	
MUSI 515	Music in World Cultures	
Select 4 credits of MUSI electives		4
Total Credits		**20**

Music Performance Study Major (B.M.)

https://www.unh.edu/program/bachelor-music/music-performance-study

Description

The Bachelor of Music in performance degree is the program for you if you wish to focus intensively on developing your skills as a performer. This program places heavy emphasis on performance study and is great preparation for master and doctoral degree programs. You'll develop your musicianship through private study, chamber music and some of the best performing ensembles in the region. You'll be immersed in the study of music theory, history, literature and world music while sharpening your listening and performance skills.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

All bachelor of music students are required to give a public performance during their senior year, which fulfills the Discovery Program capstone requirement:

- For students in the performance option, a full recital is required. Students in the bachelor of music in performance degree program are required to perform a half junior recital.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. B.M. in music majors may use MUSI 502 Musics in Context (a required core course for the major) to satisfy the Inquiry Discovery category requirement, and MUSI 515 Music in World Cultures (a required core course for the major) to satisfy the World Cultures Discovery category requirement.

Music requirements must receive a grade of C- or better.

Code	Title	Credits
Core Curriculum		
MUSI 471 & MUSI 472	Theory I and Theory I	6
MUSI 473 & MUSI 474	Ear Training I and Ear Training I	2
MUSI 475 & MUSI 476	Functional Piano I and Functional Piano I [1]	2
MUSI 571 & MUSI 572	Theory II and Theory II	6
MUSI 573 & MUSI 574	Ear Training II and Ear Training II	2
MUSI 575 & MUSI 576	Functional Piano II and Functional Piano II [1]	2
MUSI 501 & MUSI 502	The Western Musical Canon and Musics in Context	6
MUSI 515	Music in World Cultures	4
MUSI 540	Recital Attendance	0
MUSI 731	Conducting	2
Advanced Music History:		3
MUSI 701	Topics in Music History	
Advanced Music Theory:		3
MUSI 781W	Analysis: Form and Structure	
or MUSI 779	Reading and Writing Musical Scores	
Performance Study (Applied Lessons): select from the following courses		Variable
MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performing Ensemble: select from the following courses		Variable
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
Total Credits		**38**

1. Students will be given the opportunity to test out of MUSI 471 Theory I, MUSI 475 Functional Piano I, MUSI 476 Functional Piano I and MUSI 575 Functional Piano II, MUSI 576 Functional Piano II.

Bachelor of Music in Performance (Voice)

Degree program has final approval from the National Association of Schools of Music.

Code	Title	Credits
MUED 741	Techniques and Methods in Choral Music	2
MUED 755	Vocal Pedagogy	2
MUSI 520 & MUSI 521	Diction for Singers I and	4
MUSI 701	Topics in Music History	3
MUSI 545/745	Voice (voice lessons) [1]	25
Select 8 credits of the following: [2, 3]		8
MUSI 441	Concert Choir [2]	
MUSI 442	Chamber Singers	
MUSI 448	Vocal Arts Project	
Select one of the following:		8
ITAL 401 & ITAL 402	Elementary Italian I and Elementary Italian II	
GERM 401 & GERM 402	Elementary German I and Elementary German II	
FREN 401 & FREN 402	Elementary French I and Elementary French II	
Total Credits		**52**

1. Three credits of lessons each semester until the student's senior recital semester; then it is 4 credits.
2. Four credits must be MUSI 441 Concert Choir; the remaining 4 credits must be MUSI 441 Concert Choir, MUSI 442 Chamber Singers, or MUSI 448 Vocal Arts Project.
3. Students in the Bachelor of Music Performance program in the vocal track are required to complete 8 credits of ensemble. Students in this program are required to enroll in at least one ensemble in every semester of enrollment at UNH, including at least 4 credits of MUSI 441 Concert Choir, with the remaining credits coming from MUSI 441 Concert Choir, MUSI 442 Chamber Singers, and MUSI 448 Vocal Arts Project.

Bachelor of Music in Performance (Piano)

Degree program has final approval from the National Association of Schools of Music.

Code	Title	Credits
MUED 795	Special Studies	2
Advanced Music Theory [1]		3
MUSI 781W	Analysis: Form and Structure	
Select 3 credits of the following: [2]		3
MUSI 775	Composition	
MUSI 776	Composition	
MUSI 777	Advanced Composition	
MUSI 779	Reading and Writing Musical Scores	
Any 700-level advanced music history or advanced music theory course [2]		3
MUSI 455	Collaborative Piano [3]	4
MUSI 541/741	Piano (piano lessons) [4]	25
Performing Ensemble: select from the following [5]		4
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
Total Credits		**44**

1. A B.M. piano performance major must take both MUSI 701 Topics in Music History and MUSI 781W Analysis: Form and Structure.
2. A B.M. piano performance major must take an additional 700-level music history or music theory course.
3. This course will be taken a total of 4 times.
4. Three credits of lessons each semester until the semester of the senior recital; then it is 4 credits.
5. Students in the Bachelor Music Performance program, Piano are required to complete 8 credits of ensemble: 4 of these credits in MUSI 455 Collaborative Piano and 4 of these credits in a conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony, MUSI 453 Symphonic Band, MUSI 441 Concert Choir, MUSI 442 Chamber Singers, MUSI 460 Jazz Band, MUSI 454 UNH Marching Band).

Bachelor of Music in Performance (All other Instruments)

Degree program has final approval from the National Association of Schools of Music.

Code	Title	Credits
Techniques & Methods: select from the following [1]		2-3
MUED 745	Techniques and Methods in String Instruments	
MUED 747	Techniques and Methods in Woodwind Instruments	
MUED 749	Techniques and Methods in Brass Instruments	
MUED 751	Techniques and Methods in Percussion Instruments	
Select 3 credits of MUSI 700-level Advanced Music History or Advanced Music Theory [2]		3
Performance Study (Applied Lessons): select from the following [3]		25
MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performing Ensemble: select from the following [4, 5]		12
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
Total Credits		**42-43**

1. B.M. instrumental performance majors take one methods class in the appropriate instrumental family, e.g., a trumpet player would take MUED 749 Techniques and Methods in Brass Instruments, to fulfill this requirement.
2. This is in addition to the advanced music history and advanced music theory class already required.
3. Three credits of lessons are taken each semester until the student's senior recital semester; then it is 4 credits.
4. Students in the Bachelor of Music Performance program in the instrumental track for all instruments except piano are required to complete 12 credits of ensemble. Students in this program are required to enroll in at least one ensemble in every semester of enrollment at UNH, at least 6 of which must be on their primary instrument. Further, instrumentalists specializing in woodwind, brass, string, or percussion instruments should enroll in one credit of a conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony,MUSI 453 Symphonic Band, MUSI 441 Concert Choir, MUSI 442 Chamber Singers, MUSI 460 Jazz Band, MUSI 454 UNH Marching Band) in every semester of enrollment.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

Performance: Instrumental

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
MUSI 501	The Western Musical Canon	3
MUSI 471	Theory I	3
MUSI 473	Ear Training I	1
MUSI 475	Functional Piano I	1
500 Level Lesson		3
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**16**
Spring		
Discovery/QR		4
MUSI 515	Music in World Cultures	4
MUSI 472	Theory I	3
MUSI 474	Ear Training I	1
MUSI 476	Functional Piano I	1
500 Level Lesson		3
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**17**
Second Year		
Fall		
Discovery Course		4
MUED 745 or MUED 747 or MUED 749 or MUED 751	Techniques and Methods in String Instruments [1] or Techniques and Methods in Woodwind Instruments or Techniques and Methods in Brass Instruments or Techniques and Methods in Percussion Instruments	2

MUSI 571	Theory II	3
MUSI 573	Ear Training II	1
MUSI 575	Functional Piano II	1
500 Level Lesson		3
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Spring		
Discovery Course		4
MUSI 502	Musics in Context	3
MUSI 731	Conducting	2
MUSI 572	Theory II	3
MUSI 574	Ear Training II	1
MUSI 576	Functional Piano II	1
500 Level Lesson		3
Performing Ensemble [2]		1
MUSI 540	Recital Attendance	0
	Credits	**18**
Third Year		
Fall		
Discovery Course		4
Discovery Course		4
MUSI 781W or MUSI 779	Analysis: Form and Structure (Fall or Spring) or Reading and Writing Musical Scores	3
700 Level Lesson		3
Performing Ensembles [2]		2
MUSI 540	Recital Attendance	0
	Credits	**16**
Spring		
Discovery Course		4
Discovery Course		4
700 Level Lesson		3
Performing Ensembles [2]		2
MUSI 540	Recital Attendance	0
	Credits	**13**
Fourth Year		
Fall		
Discovery Course		4
Advanced Music History or Theory		3
700 Level Lesson		3
Performing Ensembles [2]		2
Free Elective		4
	Credits	**16**
Spring		
Free Elective		4
Free Elective		4
MUSI 701	Topics in Music History	3
700 Level Lesson		4
Performing Ensembles [2]		2
	Credits	**17**
	Total Credits	**128**

[1] This MUED course is in the student's primary instrument family, i.e. a trumpet player would take MUED 749.

[2] Performing Ensembles are specified in the catalog.

Performance: Vocal

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
MUSI 501	The Western Musical Canon	3
MUSI 471	Theory I	3
MUSI 473	Ear Training I	1
MUSI 475	Functional Piano I	1
MUSI 545	Voice	3
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**16**
Spring		
MUSI 515	Music in World Cultures	4
MUSI 520	Diction for Singers I	2
MUSI 472	Theory I	3
MUSI 474	Ear Training I	1
MUSI 476	Functional Piano I	1
MUSI 545	Voice	3
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Second Year		
Fall		
Foreign Language 401		4
MUSI 521		2
MUSI 571	Theory II	3
MUSI 573	Ear Training II	1
MUSI 575	Functional Piano II	1
MUSI 545	Voice	3
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Spring		
Foreign Language 402		4
MUSI 502	Musics in Context	3
MUED 755	Vocal Pedagogy	2
MUSI 572	Theory II	3
MUSI 574	Ear Training II	1
MUSI 576	Functional Piano II	1
MUSI 731	Conducting	2
MUSI 545	Voice	3
Performance Ensemble [1]		1

MUSI 540	Recital Attendance	0
	Credits	**20**
Third Year		
Fall		
Discovery/QR		4
Discovery Course		4
MUSI 781W or MUSI 779	Analysis: Form and Structure (Fall or Spring) or Reading and Writing Musical Scores	3
MUSI 745	Voice	3
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Spring		
Discovery Course		4
Discovery Course		4
MUSI 701	Topics in Music History	3
MUSI 745	Voice	3
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Fourth Year		
Fall		
Discovery Course		4
Discovery Course		4
MUSI 701	Topics in Music History (or another upper-level theory (Fall or Spring))	3
MUED 741	Techniques and Methods in Choral Music	2
MUSI 745	Voice	3
Performance Ensemble [1]		1
	Credits	**17**
Spring		
Discovery Course		4
Discovery Course		4
Free Elective		3
MUSI 745	Voice	3
Performance Ensemble [1]		1
	Credits	**15**
	Total Credits	**128**

[1] Performing Ensembles are specified in the catalog.

Student Learning Outcomes

Program Learning Outcomes

- Students will exhibit the skills necessary for artistic expression at the highest possible level as defined by their particular area of concentration in solo and small ensemble (not conducted) and large ensemble (conducted) settings.
- Students will exhibit competency in musicianship and analysis through: their understanding of musical forms and processes; aural, verbal and visual analyses; skill in performance; academic, pedagogical, and compositional applications; rudimentary ability to create derivative or original music.
- Students will demonstrate familiarity with musical literature from the formal concert repertory and from musical traditions outside of that repertory. Students will demonstrate the ability to place music in historical, cultural, and stylistic contexts.
- Students will demonstrate collegiate-level skill in the English language and competence in written and oral communication in English.
- Demonstrate the ability to use technologies current to their area of specialization for professional development and entrepreneurship, and career preparation and promotion.
- Students will demonstrate an understanding of the fundamentals of pedagogy as required in the particular field of study.
- Students in vocal studies will demonstrate competencies in diction and language, as well as interpretive skills, physicality, and stage deportment.
- Students will plan, prepare, and perform a solo recital in collaboration with faculty and staff that includes both organizational elements and artistic preparation.

Pre-Teaching Major (B.M.)

https://www.unh.edu/program/bachelor-music/pre-teaching

Description

The B.M. pre-teaching degree is the program of choice for most students seeking a five-year, combined bachelor's and master's degree program that includes certification to teach music in the public schools. Students will complete all of the skill and knowledge content requirements in this undergraduate program leaving a year-long internship and some advanced study in music and education for the fifth year.

Students applying to the Master of Arts in Teaching program need a cumulative undergraduate grade point average of 3.2 or better to ensure admission to the graduate school. Therefore, students typically apply first to UNH as a B.M. music education major and switch to this B.M. pre-teaching degree in their junior or senior year.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of the major. B.M. in music majors may use MUSI 502 Musics in Context

to satisfy the Inquiry Discovery category requirement, and MUSI 515 Music in World Cultures to satisfy the World Cultures Discovery category requirement. Additionally, B.M. music education and pre-teaching majors may use MUSI 501 The Western Musical Canon to satisfy the Fine and Performing Arts Discovery category requirement.

All bachelor of music students are required to give a public performance during their senior year, which fulfills the Discovery Program capstone requirement: for students in the pre-teaching option, a half recital is required.

Music requirements must receive a grade of C- or better.

Code	Title	Credits
Core Curriculum		
MUSI 471 & MUSI 472	Theory I and Theory I	6
MUSI 473 & MUSI 474	Ear Training I and Ear Training I	2
MUSI 475 & MUSI 476	Functional Piano I and Functional Piano I [1]	2
MUSI 571 & MUSI 572	Theory II and Theory II	6
MUSI 573 & MUSI 574	Ear Training II and Ear Training II	2
MUSI 575 & MUSI 576	Functional Piano II and Functional Piano II [1]	2
MUSI 501 & MUSI 502	The Western Musical Canon and Musics in Context	6
MUSI 515	Music in World Cultures	4
MUSI 540	Recital Attendance	0
MUSI 691	Music Internship I	1-2
MUSI 731	Conducting	2
Advanced Music History:		3
MUSI 701	Topics in Music History	
Advanced Music Theory:		3
MUSI 781W	Analysis: Form and Structure	
Performance Study (Applied Lessons): select from the following courses		Variable
MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performing Ensemble: select from the following courses		Variable
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
Total Credits		**39-40**

1 Students will be given the opportunity to test out of MUSI 471 Theory I, MUSI 475 Functional Piano I, MUSI 476 Functional Piano I and MUSI 575 Functional Piano II, MUSI 576 Functional Piano II.

Bachelor of Music Pre-Teaching Curriculum

Degree program has final approval from the National Association of Schools of Music.

Code	Title	Credits
MUED 741	Techniques and Methods in Choral Music	2
MUED 745	Techniques and Methods in String Instruments	2
MUED 747	Techniques and Methods in Woodwind Instruments [1]	2-3
MUED 749	Techniques and Methods in Brass Instruments	2
MUED 751	Techniques and Methods in Percussion Instruments	2
MUED 755	Vocal Pedagogy [2]	2
MUED 765	Instrumental Music Methods [3]	2
MUED 790	Teaching Elementary School Music	3
MUED 791	Teaching Secondary School Music	2
MUSI 520	Diction for Singers I [4]	2
MUSI 732	Conducting	2
MUSI 779	Reading and Writing Musical Scores	3
Performance Study (Applied Lessons): select from the following courses		8
MUSI 541, MUSI 545, MUSI 546, MUSI 547, MUSI 548, MUSI 549, MUSI 550, MUSI 551, MUSI 552, MUSI 553, MUSI 554, MUSI 555, MUSI 556, MUSI 557, MUSI 558, MUSI 559, MUSI 560, MUSI 561, MUSI 562, MUSI 563, MUSI 564, MUSI 741, MUSI 745, MUSI 746, MUSI 747, MUSI 748, MUSI 749, MUSI 751, MUSI 752, MUSI 753, MUSI 754, MUSI 755, MUSI 756, MUSI 757, MUSI 758, MUSI 759, MUSI 760, MUSI 761, MUSI 762, MUSI 763, MUSI 764		
Performing Ensemble: select from the following courses [5, 6, 7]		8
MUSI 441, MUSI 442, MUSI 448, MUSI 450, MUSI 452, MUSI 453, MUSI 454, MUSI 455, MUSI 456, MUSI 457, MUSI 459, MUSI 460, MUSI 462, MUSI 463, MUSI 464		
EDUC 500	Exploring Teaching	4
EDUC 605	Educational Perspectives in Critical Times	4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
EDUC 751B	Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	4
Total Credits		**58-59**

1 Vocal track students take 2 credits. Instrumental track students take 3 credits.

2 Required for Vocal track.

3 Required for Instrumental track.

4 Required for Vocal track.

5 Students in the Bachelor of Music Education program are required to complete 8 credits of ensemble; a maximum of 8 ensemble credits may be counted towards graduation. Students will enroll in one conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony,MUSI 453 Symphonic Band, MUSI 441 Concert Choir, MUSI 442 Chamber Singers, MUSI 460 Jazz Band, MUSI 454 UNH Marching Band) in every semester of their enrollment at UNH.

6 of these required ensembles must be on the student's primary instrument and 4 credits must be in a traditional conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony, MUSI 453 Symphonic Band, MUSI 441 Concert Choir). For instrumentalists, at least 1 semester of participation in MUSI 454 UNH Marching Band) and MUSI 460 Jazz Band are highly desirable.

6 Guitar music education majors will take four semesters of MUSI 464 Guitar Ensemble and four semesters of a traditional conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony, MUSI 453 Symphonic Band, MUSI 441 Concert Choir). Therefore, guitarists have a minimum of only 4 semesters required on their primary instrument.

7 Piano music education majors will take four semesters of MUSI 455 Collaborative Piano and four semesters of a traditional conducted ensemble (MUSI 450 Symphony, MUSI 452 Wind Symphony, MUSI 453 Symphonic Band, MUSI 441 Concert Choir). Therefore, pianists have a minimum of only 4 semesters required on their primary instrument.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

Pre-Teaching: Choral

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
MUSI 501	The Western Musical Canon	3
MUSI 471	Theory I	3
MUSI 473	Ear Training I	1

MUSI 475	Functional Piano I	1
MUED 745	Techniques and Methods in String Instruments	2
500 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**16**
Spring		
MUSI 515	Music in World Cultures	4
MUSI 520	Diction for Singers I	2
MUSI 472	Theory I	3
MUSI 474	Ear Training I	1
MUSI 476	Functional Piano I	1
MUED 751	Techniques and Methods in Percussion Instruments	2
500 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Second Year		
Fall		
Discovery/QR		4
EDUC 500	Exploring Teaching	4
MUSI 571	Theory II	3
MUSI 573	Ear Training II	1
MUSI 575	Functional Piano II	1
MUED 747	Techniques and Methods in Woodwind Instruments	2
500 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**17**
Spring		
MUSI 502	Musics in Context	3
MUED 755	Vocal Pedagogy	2
MUSI 572	Theory II	3
MUSI 574	Ear Training II	1
MUSI 576	Functional Piano II	1
MUED 749	Techniques and Methods in Brass Instruments	2
MUSI 731	Conducting	2
500 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**16**
Third Year		
Fall		
Discovery Course		4
Discovery Course		4
MUSI 732	Conducting	2
MUSI 779	Reading and Writing Musical Scores	3
MUSI 781W	Analysis: Form and Structure	3
MUSI 691	Music Internship I (Fall or Spring)	1
700 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**19**
Spring		
Discovery Course		4
Discovery Course		4
EDUC 605	Educational Perspectives in Critical Times	4
MUED 790	Teaching Elementary School Music	3
700 Level Lesson		1
Performance Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**17**
Fourth Year		
Fall		
Discovery Course		4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
MUED 741	Techniques and Methods in Choral Music	2
MUED 791	Teaching Secondary School Music	2
MUSI 791	Music Internship II (Optoinal Fall or Spring)	2
700 Level Lesson		1
Performance Ensemble [1]		1
	Credits	**16**
Spring		
Discovery Course		4
Free Elective		4
EDUC 751A or EDUC 751B	Inclusive Elementary Education: Literacies and Learning for Diverse Learners or Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	4
MUSI 701	Topics in Music History	3
700 Level Lesson		1
Performance Ensemble [1]		1
	Credits	**17**
	Total Credits	**133**

Pre-Teaching: Instrumental

First Year

Fall		**Credits**
ENGL 401	First-Year Writing	4
MUSI 501	The Western Musical Canon	3
MUSI 471	Theory I	3
MUSI 473	Ear Training I	1
MUSI 475	Functional Piano I	1
MUED 745	Techniques and Methods in String Instruments	2
500 Level Lesson		1
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**16**

Spring		
Discovery/QR		4
MUSI 515	Music in World Cultures	4
MUSI 472	Theory I	3
MUSI 474	Ear Training I	1
MUSI 476	Functional Piano I	1
MUED 751	Techniques and Methods in Percussion Instruments	2
500 Level Lesson		1
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**17**
Second Year		
Fall		
EDUC 500	Exploring Teaching	4
MUSI 571	Theory II	3
MUSI 573	Ear Training II	1
MUSI 575	Functional Piano II	1
MUED 747	Techniques and Methods in Woodwind Instruments	2
500 Level Lesson		1
Performing Ensembles [1]		1
MUSI 540	Recital Attendance	0
	Credits	**13**
Spring		
Discovery Course		4
MUSI 502	Musics in Context	3
MUSI 572	Theory II	3
MUSI 574	Ear Training II	1
MUSI 576	Functional Piano II	1
MUED 749	Techniques and Methods in Brass Instruments	2
MUSI 731	Conducting	2
500 Level Lesson		1
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**18**
Third Year		
Fall		
Discovery Course		4
EDUC 605	Educational Perspectives in Critical Times	4
MUSI 732	Conducting	2
MUSI 779	Reading and Writing Musical Scores	3
MUSI 781W	Analysis: Form and Structure	3
MUSI 691	Music Internship I (Fall or Spring)	1
700 Level Lesson		1
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**19**
Spring		
Discovery Course		4
EDUC 701	Human Development & Learning: Cultural Perspectives	4
MUED 765	Instrumental Music Methods	2
MUED 790	Teaching Elementary School Music	3
700 Level Lesson		1
Performing Ensemble [1]		1
MUSI 540	Recital Attendance	0
	Credits	**15**
Fourth Year		
Fall		
Discovery Course		4
Discovery Course		4
MUED 741	Techniques and Methods in Choral Music	2
MUED 791	Teaching Secondary School Music	2
MUSI 791	Music Internship II (Optional Fall or Spring)	2
700 Level Lesson		1
Performing Ensemble [1]		1
	Credits	**16**
Spring		
Discovery Course		4
Free Elective		4
Free Elective		1
EDUC 751A or EDUC 751B	Inclusive Elementary Education: Literacies and Learning for Diverse Learners or Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	4
MUSI 701	Topics in Music History	3
700 Level Lesson		1
Performing Ensemble [1]		1
	Credits	**18**
	Total Credits	**132**

[1] Performing Ensembles are specified in the catalog.

Student Learning Outcomes

Program Learning Outcomes

- Students will exhibit the skills necessary for artistic expression at the highest possible level as defined by their particular area of concentration in solo and small ensemble (not conducted) and large ensemble (conducted) settings.
- Students will exhibit competency in musicianship and analysis through: their understanding of musical forms and processes; aural, verbal and visual analyses; skill in performance; academic, pedagogical, and compositional applications; rudimentary ability to create derivative or original music.
- Students will demonstrate familiarity with musical literature from the formal concert repertory and from musical traditions outside of that repertory. Students will demonstrate the ability to place music in historical, cultural, and stylistic contexts.
- Students will demonstrate collegiate-level skill in the English language and competence in written and oral communication in English.
- Demonstrate the ability to use technologies current to their area of specialization for professional development and entrepreneurship, and career preparation and promotion.

- Students demonstrate ability to lead students to increased musical knowledge and advancing musical performance.
- Students demonstrate knowledge of age-appropriate vocal and instrumental pedagogy.
- Students demonstrate an understanding of best practices and applicable learning theories in music education.
- Students demonstrate the ability to prepare classes and rehearsals via score study and lesson planning that includes awareness of needed modifications.
- Students aurally discern accuracy and expressive elements in student performances.
- Students demonstrate the ability to assess their pupils' learning and progress in conjunction with best educational practices.
- Students are able to assess the success of their own class teaching and rehearsals.

Native American and Indigenous Studies (NAIS)

Programs

- Native American and Indigenous Studies Minor (p. 315)

Native American and Indigenous Studies Minor

https://www.unh.edu/program/minor/native-american-indigenous-studies

Description

As an interdisciplinary minor, Native American and Indigenous studies (NAIS) offers a broad understanding of the history, lands, culture, literature, language and artistic expression, science and technology, race and identity, and social organization and political statuses of Native American and Indigenous peoples within and beyond North America. The minor provides an introduction to Indigenous values and a basis for understanding broad Indigenous issues.

NAIS complements a range of majors, including anthropology, English, history, political science, health and human services, music, psychology, biology, botany, natural resources and sustainability. The UNH Education Abroad program offers a variety of opportunities to UNH students to explore the NAIS minor overseas.

The minor will help students acquire the necessary skills and qualifications for a variety of graduate study and employment opportunities and enhance competitiveness for federal scholarships and programs, such as the Peace Corps, Teach for America or the National Parks Service. Students with NAIS training will be prepared for work with Tribal and Indigenous leaders and officials, public health practitioners and administrators, and/or working with institutions that require employees with cultural and historical sensitivity to Indigenous issues, such as museums or other public institutions. NAIS graduates may also go on to careers with organizations with Indigenous interests in the areas of education, business, arts, government and law, nonprofit and advocacy, and healthcare and science (e.g., the Native American Rights Fund, Native American Arts Council, American Indian Science and Engineering Society).

Requirements

Academic policies related to Minors.

- The minor consists of completing five courses (20 credits).

Code	Title	Credits
Requirements		
NAIS 400	Introduction to Native American and Indigenous Studies [1]	4
Select one of the following options:		16
Option A:		
Select four elective courses from the approved list below		
Option B:		
Select three elective courses from the approved list below [2]		
Select one independent study or credit-bearing internship (HIST 695 or ANTH 700 or other option approved by coordinator)		
Total Credits		**20**

1 Also fulfills World Cultures Discovery requirement
2 Two courses can be from a UNH-approved education abroad program (see below).

Code	Title	Credits
Approved Electives		
AMST 444C	Picturing America: The Arts & Social Change	4
ANTH 412	Broken Pots and Buried Cities: Introduction to World Archaeology	4
ANTH 500	Peoples and Cultures of the World (A: North America and B: Latin America)	4
ANTH 501	World Archaeological Cultures (B: South America)	4
ANTH 513	Ethnographic Methods	4
ANTH 514	Method and Theory in Archaeology	4
ANTH 530	Multispecies Planet: Animals, Plants, and Landscapes Across Cultures	4
ANTH 620	Ritual and Religion of Ancient Mesoamerica	4
ANTH 785	The Anthropology of Dreams and Dreaming	4
BIOL 408	Plants and Civilization	4
ENGL 440A	Honors/On Race in Culture and Society	4
ENGL 550	Introduction to the Literature and Culture of Race	4
HIST 405	History of Early America	4
HIST 498	Explorations of Historical Perspectives	4
HIST 511	History of New Hampshire	4
HIST 532	Modern Latin America	4
HIST 595	Explorations (on an approved topic)	1-4
HIST 600	Explorations (Modern Native America)	4
HIST 603	European Conquest of North America	4
HIST 632	Latin American History: Topics	4
MARI 705	Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy	3
MUSI 515	Music in World Cultures	4
NR 660	Ecology and Biogeography of New Zealand	5
NR 795	Investigations (on an approved topic)	1-4
OUT 515	History of Outdoor Pursuits in North America	4
PSYC 581	Child Development	4
PSYC 791W	Special Topics (on an approved topic)	4
RMP 511	Issues of Wilderness and Nature in American Society (with Forrest Schwartz)	4
SPAN 526	Introduction to Latin American Cultures	4
WGS 505	Survey in Women's Studies (on an approved topic)	4

NAIS UNH-Approved Study Abroad Programs

Thailand-TEAN-Chang Mai; CIEE Khon Kaeo

USAC-Southwest Minzu University (Southwest Universities for Nationalities). Among the courses offered:

- Buddhism and Culture (ANTH/SOC)
- Tibetan Culture and Society (ANTH/SOC
- Guizhou Field Study (ANTH/WLL, 200-level, l credit)

Morocco - IES & CIEE. Courses offered:

- Gender and Society in North Africa and Beyond
- North African Cultural Identities
- Internship/Social Action Seminar
- Islam In Morocco And North Africa (English-taught)
- Arab Media and Issues of Politics and Culture

New Zealand - Otago. Courses offered:

- Maori Studies

Peru - SIT: Indigenous Peoples and Globalization. Courses offered:

- History of Indigenous Cultures in Peru
- Indigenous Peoples in Motion: Changes, Resistance, and Globalization
- Quechua
- Research Methods and Ethics
- Independent Study Project

Senegal -CIEE. Courses offered:

- Contemporary Senegalese Society and Culture
- Intercultural Communication and Leadership (English)
- Environment and Development in Senegal and Sub-Saharan Africa (English)
- Public Health Issues and Challenges in West Africa

Tanzania-CIEE. Courses offered:

- Kiswahili
- Field Research Seminar
- Pre-History, Myths, Legends, and Beliefs of East Africa
- Contemporary Educational Issues in East Africa
- Gender and Development
- History of East Africa
- Poverty Analysis for Socio-economic Development

Bhutan -API at Royal Thimphu College with internship. Courses offered:

- Anthropology of the Himalayas
- Ethnography of Bhutan
- Anthropology of Identity
- Anthropology of Gender
- Kinship and Family
- ASC201: Anthropology of Globalization
- ASC301: Anthropology of Development
- ASC303: Applied Anthropology
- ASC304: Contemporary Issues in Anthropology
- ATH101: Ecological Anthropology
- ATH102: Medical Anthropology
- ATH203: History and Theory of Anthropology
- ATH204: Political Anthropology
- ATH305: Anthropology of Religion and Rituals

Neuroscience and Behavior

Programs

- Neuroscience and Behavior Major (B.S.) (p. 438)

Philosophy (PHIL)

Philosophy has always been at the heart of liberal education, deepening and enriching the lives of those who pursue it. The philosophy major provides students with the opportunity to confront a wide variety of questions, especially those that cannot be dealt with in the framework of other disciplines. Such questions include those about the ultimate nature of reality: Does God exist? Are minds distinct from bodies? Are there more things between heaven and Earth than are dreamed of in science? Other questions probe what it is to know: Do we know that material bodies external to our minds exist? What does it mean to justify a belief? Still other questions are about how we ought to be or act: What is a good person? Are there moral rules? How are they justified? Must we obey them?

Philosophy also concerns itself with other disciplines: What makes something a work of art? What distinguishes a scientific theory from a religious theory or myth? Is capitalism amoral? Is legal authority moral or political?

The Department of Philosophy offers a wide range of courses exposing students to the full scope of philosophical activity. Grappling with major primary texts from the history of philosophy is an important emphasis of the program, for philosophy today is the continuation of a conversation that extends back to the ancient Greeks and the Vedic scriptures. Philosophy also always has wrestled with cutting-edge topics emerging in the current culture. Some recent examples are: What are the prospects for machines with mental lives? What are the implications of new views in cosmology? How do we handle the pressing ethical dilemmas brought on by emerging medical technologies, or by the historically unparalleled rate of destruction of the Earth's environment? Are gender and race socially constructed concepts rather than biological concepts?

Options in the Major

Students may select one of three options for the philosophy major, but are not required to do so. The options do not add additional requirements to the general philosophy major, but rather focus philosophy electives in a specific area.

- The **ethics and social responsibility (ESR) option** provides official recognition for those who choose to emphasize concern with moral responsibility in personal and social contexts, including the political and corporate arenas. You will choose courses in environmental ethics, law, evolution, social and political philosophy, and feminism.
- The **business, innovation, and technology (BIT) option** provides official recognition for those who choose to emphasize the study of the relationships between markets, technology, and human well-being. You will choose courses in the philosophy of artificial intelligence, evolution, neuroscience, biotechnology, business ethics, economic policy, environmental ethics and other high-impact subjects.

- The **political and legal philosophy (PLP) option** provides official recognition for those who choose to emphasize the systematic study of the fundamental philosophical questions regarding politics, law and justice, and how they apply to contemporary issues. You will choose courses in the nature of justice, limits of state power, balancing liberty and equality, capitalism vs. socialism, authoritarian challenges to democracy, fascism and antifascism, privacy, freedom of expression, police ethics, justifications for punishment, racial and gender injustice, wealth inequality and crime, immigration, and other issues at the interface of ethics, justice, law and states.

Research

Students are strongly encouraged to consider the possibility of presenting research at the Philosophy Department Undergraduate Research Conference and/or fulfilling an undergraduate research grant. This is especially encouraged for students considering graduate school in philosophy.

Graduate Preparatory Emphasis

This emphasis is strongly recommended for students who plan to do graduate work in philosophy. Beyond the ten (10) courses required for the major, such students should select, with their adviser's approval, two additional philosophy courses above the 400-level, for a total of twelve (12) courses. Consult the Department of Philosophy website for additional graduate school planning information.

Honors in Philosophy

To graduate "With Honors" in philosophy, students will be expected to complete their philosophy capstone requirement; complete two additional 700-level PHIL courses (The 700-level course options will vary depending upon which departmental honors option [thesis or portfolio] the student fulfills; they will be expected to have an overall GPA of 3.5 or above; they will engage in independent study and research (under the supervision of a faculty member) beyond the requirements of their coursework; and, they will be expected to present and defend a culminating project to the department's faculty. Consult the Department of Philosophy website for more details.

Distinction on Senior Thesis

Distinction on Senior Thesis is granted by a unanimous determination of the student's committee that the thesis exceeds A-level work and is worthy of special recognition.

https://cola.unh.edu/philosophy

Programs

- Philosophy Major (B.A.) (p. 317)
- Philosophy Major: Business, Innovation & Technology Option (B.A.) (p. 319)
- Philosophy Major: Ethics and Social Responsibility Option (B.A.) (p. 321)
- Philosophy Major: Political and Legal Philosophy Option (B.A.) (p. 323)
- Philosophy Minor (p. 326)
- Philosophy of Business, Innovation, & Technology Cognate (p. 240)
- Political and Legal Philosophy Cognate (p. 240)

Faculty

Philosophy Department Faculty

Philosophy Major (B.A.)

https://www.unh.edu/program/bachelor-arts/philosophy

Description

UNH philosophy majors acquire the ability to think systematically and imaginatively about fundamental and enduring issues such as morality, justice, happiness, beauty, gender, race, nature, artificial intelligence, space, time, and the meaning of life and death. Our internationally-renowned professors emphasize discussion, debate and writing in our courses. Wrestling with the “big questions” from diverse and global perspectives will prepare you exceptionally well for a variety of fulfilling careers. A lively and nurturing community personally invested in the success of our high achieving students, we take pride in watching our graduates excel in top law and graduate schools, innovative social justice programs, and various positions from Wall Street to Silicon Valley and beyond that seek hard workers who can think rigorously and communicate clearly.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Majors must take a minimum of ten (10) philosophy courses, for a total of 40 credits. A single course can satisfy multiple requirements for the major. The required minimum overall GPA in major coursework is 2.00 and minimum grade of C- for all courses counting toward the major. Candidates for a degree must satisfy additional University requirements for graduation, such as:

1. University "Writing Intensive" Requirements,
2. Philosophy majors must satisfy the language requirement for the B.A., as a part of their liberal arts education. See the UNH Advising Handbook for how students may satisfy this requirement. Students who would like to satisfy this requirement with a language not offered by COLA (such as American Sign Language) should speak with their advisor about how to petition for an exception,
3. minimum number of credits (128 credits for B.A. degree), and
4. University Discovery Requirements.

Consult with your advisor early and often to plan the optimal path for fulfilling major and University requirements.

Code	Title	Credits
Core Requirements		
PHIL 412	Beginning Logic	4
PHIL 500	Workshop	4
PHIL 530	Ethics	4
PHIL 570	Ancient Philosophy	4
PHIL 580	Modern Philosophy from Descartes to Kant	4
Electives [1]		
Select three (3) additional philosophy courses of the student's choice.		12
Discovery Capstone Requirement		
Select two (2) 700-level philosophy courses (excluding PHIL 795, PHIL 798, and PHIL 799) of the student's choice, at least one of these should be taken in the senior year		8
Total Credits		**40**

[1] PHIL 495 Tutorial Reading and PHIL 795 Independent Study normally do not count toward fulfilling major requirement credits; exceptions may be granted by special permission.

Note that it is in the nature of 700-level seminars to presuppose by default that students have completed the main 400-level and 500-level core requirements (PHIL 412 Beginning Logic, PHIL 500 Workshop, PHIL 530 Ethics, PHIL 570 Ancient Philosophy, PHIL 580 Modern Philosophy from Descartes to Kant) and so free reference is made to materials, views, techniques, etc. covered in those lower-level core requirements.

Discovery Requirements

For students majoring in only philosophy: philosophy majors may "double count" any two courses toward the major and also to satisfy Discovery requirements. For example, a philosophy major can count (1) PHIL 412 Beginning Logic toward the major requirement as well as using this course to satisfy the Quantitative Reasoning Discovery Category and (2) they can also count PHIL 421 Philosophy and the Arts toward both the major and the Fine and Performing Arts Discovery Category. Because PHIL 412 Beginning Logic and PHIL 570 Ancient Philosophy are required for the major and also satisfy Quantitative Reasoning and Humanities Categories, respectively, all majors could simply count these two courses toward their Discovery requirements. In various circumstances—for instance if a student already satisfied those Discovery requirements before becoming a philosophy major—one might prefer to count other philosophy courses toward different Discovery Categories, and they are free to do so.

For students double majoring with philosophy: The Department sets no limits on how many courses students may "double count" toward both the philosophy major and Discovery categories if philosophy is your **second** major. A double major with philosophy as the second major could in principle count any of the following courses toward the major while satisfying five Discovery Categories:

1. **Quantitative Reasoning (QR)** Discovery Category could be satisfied by PHIL 412 Beginning Logic.
2. **Fine and Performing Arts (FPA)** Discovery Category could be satisfied by PHIL 421 Philosophy and the Arts.
3. **Humanities (HUMA)** Discovery Category could be satisfied by PHIL 401 Introduction to Philosophy, PHIL 405 Critical Thinking, PHIL 410 Happiness, Well-Being , and a Good Life, PHIL 419 Race, Gender and Social Justice, PHIL 420 Introduction to Philosophy of Law and Justice, PHIL 430 Ethics and Society, PHIL 431 Business Ethics, PHIL 436 Social and Political Philosophy, PHIL 440A Honors/ Who Are You? Personal Identity and Humanity, PHIL 440B Honors/ Who's Human Now?, PHIL 510 Philosophy and Feminism, PHIL 525 Existentialism, PHIL 531 Topics in Professional and Business Ethics, or PHIL 570 Ancient Philosophy.
4. **World Cultures (WC)** Discovery Category could be satisfied by PHIL 440C Honors/The Copernican Lens: Finding a Place for Humanity or PHIL 520 Introduction to Eastern Philosophy.
5. **Environment, Technology, and Society (ETS)** Discovery Category could be satisfied by PHIL 424 The Future of Humanity: Science, Technology, and Society, PHIL 435 Human Nature and Evolution, PHIL 447 A.I., Robots, and People, or PHIL 450 Environmental Ethics.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
BA Language Course		4
Discovery Course		4
Discovery Course		4
Advising Seminar		1
	Credits	**17**
Spring		
PHIL Elective Course		4
BA Language Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
PHIL 500	Workshop	4
PHIL Elective Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 412	Beginning Logic	4
PHIL 530	Ethics	4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Third Year		
Fall		
PHIL 570	Ancient Philosophy	4
PHIL elective course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**

Spring		
PHIL 580	Modern Philosophy from Descartes to Kant	4
PHIL elective course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Fourth Year		
Fall		
PHIL 700-level Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 700-level Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**129**

[1] Students can explore a second major, minor, or general electives.

Student Learning Outcomes

UNH philosophy majors acquire the ability to think systematically and imaginatively about fundamental and enduring issues such as morality, justice, happiness, beauty, gender, race, nature, artificial intelligence, space, time, and the meaning of life and death. Our internationally-renowned professors emphasize discussion, debate and writing in our courses. Wrestling with the “big questions” from diverse and global perspectives prepares students exceptionally well for a variety of fulfilling careers. Cultivating a lively and nurturing community personally invested in the success of our high achieving students, we take pride in watching our graduates excel in top law and graduate schools, innovative social justice programs, and various positions from Wall Street to Silicon Valley.

The main way we oversee student progress is through close mentorship, early on in our 2nd year orientation designed for new majors (PHIL 500 Workshop), and culminating in their presentation of research in two required 700-level seminars. We also strongly encourage participation in the annual Philosophy Department Undergraduate Research Conference.

Program Learning Outcomes

- Students understand major philosophers and philosophical ideas accurately.
- Students apply their understanding of ideas in novel contexts.
- Students write effectively.
- Students speak effectively.
- Students argue with depth, precision, balance, and insight.
- Students understand the formal structure of arguments and understand rules of inference.
- Students read analytically, critically, and empathetically.
- Students critically assess their own preconceptions, commitments and ideas.

Philosophy Major: Business, Innovation & Technology Option (B.A.)

https://www.unh.edu/program/bachelor-arts/philosophy-business-innovation-technology

Description

While completing the philosophy major, students may select the option in Philosophy of Business, Innovation and Technology. This option provides official recognition for those who choose to emphasize the study of the relationships between markets, technology and human well-being. Students will choose courses in the philosophy of artificial intelligence, evolution, neuroscience, biotechnology, business ethics, economic policy, environmental ethics and other high impact subjects.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students must fulfill the requirements of the philosophy major plus the requirements of the option. Majors must take a minimum of ten (10) philosophy courses, for a total of 40 credits. A single course can satisfy multiple requirements for the major. The required minimum overall GPA in major coursework is 2.00 and the minimum grade for all courses counting toward the major is a "C-." Candidates for a degree must satisfy additional University requirements for graduation, such as:

1. University "Writing Intensive" Requirements,
2. Philosophy majors must satisfy the language requirement for the B.A., as a part of their liberal arts education. See the UNH Advising Handbook for how students may satisfy this requirement. Students who would like to satisfy this requirement with a language not offered by COLA (such as American Sign Language) should speak with their advisor about how to petition for an exception,
3. minimum number of credits (128 credits for B.A. degree), and
4. University Discovery Requirements.

Consult with your advisor early and often to plan the optimal path for fulfilling major and University requirements.

Code	Title	Credits
Core Requirements		
PHIL 412	Beginning Logic	4
PHIL 500	Workshop	4
PHIL 530	Ethics	4

PHIL 570	Ancient Philosophy	4
PHIL 580	Modern Philosophy from Descartes to Kant	4
Electives [1]		
Select three (3) additional philosophy courses of the student's choice.		12
Discovery Capstone Requirement		
Select two (2) 700-level philosophy courses (excluding PHIL 795, PHIL 798, and PHIL 799) of the student's choice, at least one of these should be taken in the senior year		8
Total Credits		**40**

[1] PHIL 495 Tutorial Reading and PHIL 795 Independent Study normally do not count toward fulfilling major requirement credits; exceptions may be granted by special permission.

Business, Innovation, and Technology Option Requirements

This option requires **four (4)** Philosophy courses **(for a total of 16 credits)** from those listed below. Any of these courses can also count toward the general requirements of the Philosophy major, for example, by counting **three (3)** of these courses as the elective courses required for the major.

Code	Title	Credits
Requirements		
Select four courses from the following:		16
PHIL 405	Critical Thinking	
PHIL 419	Race, Gender and Social Justice	
PHIL 420	Introduction to Philosophy of Law and Justice	
PHIL 421	Philosophy and the Arts	
PHIL 424	The Future of Humanity: Science, Technology, and Society	
PHIL 424H	Honors/The Future of Humanity: Science, Technology, and Society	
PHIL 430	Ethics and Society	
PHIL 430W	Ethics and Society	
PHIL 431	Business Ethics	
PHIL 435	Human Nature and Evolution	
PHIL 436	Social and Political Philosophy	
PHIL 436H	Honors/Social and Political Philosophy	
PHIL 436W	Social and Political Philosophy	
PHIL 440B	Honors/Who's Human Now?	
PHIL 447	A.I., Robots, and People	
PHIL 450	Environmental Ethics	
PHIL 531	Topics in Professional and Business Ethics	
PHIL 630	Neuroscience and Philosophy	
PHIL 660	Law, Medicine, and Ethics	
PHIL 780	Special Topics [1]	

[1] By permission because only some sections of this course will count toward the major option.

Note that it is in the nature of 700-level seminars to presuppose by default that students have completed the main 400-level and 500-level core requirements (PHIL 412 Beginning Logic, PHIL 500 Workshop, PHIL 530 Ethics, PHIL 570 Ancient Philosophy, PHIL 580 Modern Philosophy from Descartes to Kant) and so free reference is made to materials, views, techniques, etc. covered in those lower-level core requirements.

Discovery Requirements

For students majoring in only philosophy: philosophy majors may "double count" any two courses toward the major and also to satisfy Discovery requirements. For example, a philosophy major can count (1) PHIL 412 Beginning Logic toward the major requirement as well as using this course to satisfy the Quantitative Reasoning Discovery Category and (2) they can also count PHIL 421 Philosophy and the Arts toward both the major and the Fine and Performing Arts Discovery Category. Because PHIL 412 Beginning Logic and PHIL 570 Ancient Philosophy are required for the major and also satisfy Quantitative Reasoning and Humanities Categories, respectively, all majors could simply count these two courses toward their Discovery requirements. In various circumstances—for instance if a student already satisfied those Discovery requirements before becoming a philosophy major—one might prefer to count other philosophy courses toward different Discovery Categories, and they are free to do so.

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Discovery Course		4
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	Credits	**17**
Spring		
BA Language Course		4
Discovery Course		4
Discovery Course		4

Discovery Course		4
	Credits	**16**
Second Year		
Fall		
PHIL 500	Workshop	4
PHIL Elective Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 412	Beginning Logic	4
PHIL 530	Ethics	4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Third Year		
Fall		
PHIL 570	Ancient Philosophy	4
PHIL 700-level Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 580	Modern Philosophy from Descartes to Kant	4
PHIL Elective Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Fourth Year		
Fall		
PHIL 700-level Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 700-level Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

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- Students speak effectively.
- Students argue with depth, precision, balance, and insight.
- Students understand the formal structure of arguments and understand rules of inference.
- Students read analytically, critically, and empathetically.
- Students critically assess their own preconceptions, commitments and ideas.

Philosophy Major: Ethics and Social Responsibility Option (B.A.)

https://www.unh.edu/program/bachelor-arts/philosophy-ethics-social-responsibility

Description

While completing the philosophy major, students may select the option in ethics and social responsibility. This option provides official recognition for those who choose to emphasize concern with moral responsibility in personal and social contexts, including the political and corporate arenas. Students will choose courses in environmental ethics, law, evolution, social and political philosophy, and feminism.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students must fulfill the requirements of the philosophy major plus the requirements of the option. Majors must take a minimum of ten (10) philosophy courses, for a total of 40 credits. A single course can satisfy multiple requirements for the major. The required minimum overall GPA

in major coursework is 2.00 and the minimum grade for all courses counting toward the major is a "C-." Candidates for a degree must satisfy additional University requirements for graduation, such as:

1. University "Writing Intensive" Requirements,
2. Philosophy majors must satisfy the language requirement for the B.A., as a part of their liberal arts education. See the UNH Advising Handbook for how students may satisfy this requirement. Students who would like to satisfy this requirement with a language not offered by COLA (such as American Sign Language) should speak with their advisor about how to petition for an exception,
3. minimum number of credits (128 credits for B.A. degree), and
4. University Discovery Requirements.

Consult with your advisor early and often to plan the optimal path for fulfilling major and University requirements.

Code	Title	Credits
Core Requirements		
PHIL 412	Beginning Logic	4
PHIL 500	Workshop	4
PHIL 530	Ethics	4
PHIL 570	Ancient Philosophy	4
PHIL 580	Modern Philosophy from Descartes to Kant	4
Electives [1]		
Select three (3) additional philosophy courses of the student's choice.		12
Discovery Capstone Requirement		
Select two (2) 700-level philosophy courses (excluding PHIL 795, PHIL 798, and PHIL 799) of the student's choice, at least one of these should be taken in the senior year		8
Total Credits		**40**

[1] PHIL 495 Tutorial Reading and PHIL 795 Independent Study normally do not count toward fulfilling major requirement credits; exceptions may be granted by special permission.

Ethics and Social Responsibility Option Requirements

This option requires **four (4)** philosophy courses **(for a total of 16 credits)** from those listed below. Any of these courses can also count toward the general requirements of the Philosophy major, for example, by counting three of these courses as the elective courses required for the major.

Code	Title	Credits
Requirements		
Select four courses from the following:		16
PHIL 405	Critical Thinking	
PHIL 410	Happiness, Well-Being , and a Good Life	
PHIL 419	Race, Gender and Social Justice	
PHIL 420	Introduction to Philosophy of Law and Justice	
PHIL 424	The Future of Humanity: Science, Technology, and Society	
PHIL 424H	Honors/The Future of Humanity: Science, Technology, and Society	
PHIL 430	Ethics and Society	
PHIL 430W	Ethics and Society	
PHIL 431	Business Ethics	
PHIL 436	Social and Political Philosophy	
PHIL 436H	Honors/Social and Political Philosophy	
PHIL 436W	Social and Political Philosophy	
PHIL 440B	Honors/Who's Human Now?	
PHIL 450	Environmental Ethics	
PHIL 510	Philosophy and Feminism	
PHIL 520	Introduction to Eastern Philosophy	
PHIL 525	Existentialism	
PHIL 531	Topics in Professional and Business Ethics	
PHIL 660	Law, Medicine, and Ethics	
PHIL 780	Special Topics	

[1] By permission because only some sections of the course will count toward the major option.

Note that it is in the nature of 700-level seminars to presuppose by default that students have completed the main 400-level and 500-level core requirements (PHIL 412 Beginning Logic, PHIL 500 Workshop, PHIL 530 Ethics, PHIL 570 Ancient Philosophy, PHIL 580 Modern Philosophy from Descartes to Kant) and so free reference is made to materials, views, techniques, etc. covered in those lower-level core requirements.

Discovery Requirements

For students majoring in only philosophy: philosophy majors may "double count" any two courses toward the major and also to satisfy Discovery requirements. For example, a philosophy major can count (1) PHIL 412 Beginning Logic toward the major requirement as well as using this course to satisfy the Quantitative Reasoning Discovery Category and (2) they can also count PHIL 421 Philosophy and the Arts toward both the major and the Fine and Performing Arts Discovery Category. Because PHIL 412 Beginning Logic and PHIL 570 Ancient Philosophy are required for the major and also satisfy Quantitative Reasoning and Humanities Categories, respectively, all majors could simply count these two courses toward their Discovery requirements. In various circumstances—for instance if a student already satisfied those Discovery requirements before becoming a philosophy major—one might prefer to count other philosophy courses toward different Discovery Categories, and they are free to do so.

For students double majoring with philosophy: The Department sets no limits on how many courses students may "double count" toward both the philosophy major and Discovery categories if philosophy is your **second** major. A double major with philosophy as the second major could in principle count any of the following courses toward the major while satisfying five Discovery Categories:

1. **Quantitative Reasoning (QR)** Discovery Category could be satisfied by PHIL 412 Beginning Logic.
2. **Fine and Performing Arts (FPA)** Discovery Category could be satisfied by PHIL 421 Philosophy and the Arts.
3. **Humanities (HUMA)** Discovery Category could be satisfied by PHIL 401 Introduction to Philosophy, PHIL 405 Critical Thinking, PHIL 410 Happiness, Well-Being , and a Good Life, PHIL 419 Race, Gender and Social Justice, PHIL 420 Introduction to Philosophy of Law and Justice, PHIL 430 Ethics and Society, PHIL 431 Business Ethics, PHIL 436 Social and Political Philosophy, PHIL 440A Honors/Who Are You? Personal Identity and Humanity, PHIL 440B Honors/Who's Human Now?, PHIL 510 Philosophy and Feminism, PHIL 525 Existentialism, PHIL 531 Topics in Professional and Business Ethics, or PHIL 570 Ancient Philosophy.
4. **World Cultures (WC)** Discovery Category could be satisfied by PHIL 440C Honors/The Copernican Lens: Finding a Place for Humanity or PHIL 520 Introduction to Eastern Philosophy.
5. **Environment, Technology, and Society (ETS)** Discovery Category could be satisfied by PHIL 424 The Future of Humanity: Science, Technology, and Society, PHIL 435 Human Nature and Evolution, PHIL 447 A.I., Robots, and People, or PHIL 450 Environmental Ethics.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
BA Language Course		4
Discovery Course		4
Discovery Course		4
Advising Seminar		1
	Credits	**17**
Spring		
BA Language Course		4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
PHIL 500	Workshop	4
PHIL Elective Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 412	Beginning Logic	4
PHIL 530	Ethics	4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Third Year		
Fall		
PHIL 570	Ancient Philosophy	4
PHIL Elective Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 580	Modern Philosophy from Descartes to Kant	4
PHIL Elective Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Fourth Year		
Fall		
PHIL 700-level Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 700-level Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

UNH philosophy majors acquire the ability to think systematically and imaginatively about fundamental and enduring issues such as morality, justice, happiness, beauty, gender, race, nature, artificial intelligence, space, time, and the meaning of life and death. Our internationally-renowned professors emphasize discussion, debate and writing in our courses. Wrestling with the "big questions" from diverse and global perspectives prepares students exceptionally well for a variety of fulfilling careers. Cultivating a lively and nurturing community personally invested in the success of our high achieving students, we take pride in watching our graduates excel in top law and graduate schools, innovative social justice programs, and various positions from Wall Street to Silicon Valley.

The main way we oversee student progress is through close mentorship, early on in our 2nd year orientation designed for new majors (PHIL 500 Workshop), and culminating in their presentation of research in two required 700-level seminars. We also strongly encourage participation in the annual Philosophy Department Undergraduate Research Conference.

Program Learning Outcomes

- Students understand major philosophers and philosophical ideas accurately.
- Students apply their understanding of ideas in novel contexts.
- Students write effectively.
- Students speak effectively.
- Students argue with depth, precision, balance, and insight.
- Students understand the formal structure of arguments and understand rules of inference.
- Students read analytically, critically, and empathetically.
- Students critically assess their own preconceptions, commitments and ideas.

Philosophy Major: Political and Legal Philosophy Option (B.A.)

https://www.unh.edu/program/bachelor-arts/philosophy-political-legal-philosophy

Description

The political and legal philosophy option in the philosophy major gives students interested in politics, law and justice the opportunity to focus their philosophy major courses around their interests in a systematic and rigorous way. Philosophy has long been a major for high-achieving students interested in law, and our graduates are admitted regularly to top law schools such as Harvard, Yale, Stanford, University of Chicago,

NYU and Duke, among others. We are also a home for UNH students interested and active in political philosophy. Our faculty members have considerable expertise in both political and legal philosophy, with some serving on UNH's pre-law advisory committee.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students must fulfill the requirements of the philosophy major plus the requirements of the option. Majors must take a minimum of ten (10) philosophy courses, for a total of 40 credits. A single course can satisfy multiple requirements for the major. The required minimum overall GPA in major coursework is 2.00 and the minimum grade for all courses counting toward the major is a "C-." Candidates for a degree must satisfy additional University requirements for graduation, such as:

1. University "Writing Intensive" Requirements,
2. Philosophy majors must satisfy the language requirement for the B.A., as a part of their liberal arts education. See the UNH Advising Handbook for how students may satisfy this requirement. Students who would like to satisfy this requirement with a language not offered by COLA (such as American Sign Language) should speak with their advisor about how to petition for an exception,
3. minimum number of credits (128 credits for B.A. degree), and
4. University Discovery Requirements.

Consult with your advisor early and often to plan the optimal path for fulfilling major and University requirements.

Code	Title	Credits
Core Requirements		
PHIL 412	Beginning Logic	4
PHIL 500	Workshop	4
PHIL 530	Ethics	4
PHIL 570	Ancient Philosophy	4
PHIL 580	Modern Philosophy from Descartes to Kant	4
Electives [1]		
Select three (3) additional philosophy courses of the student's choice.		12
Discovery Capstone Requirement		
Select two (2) 700-level philosophy courses (excluding PHIL 795, PHIL 798, and PHIL 799) of the student's choice, at least one of these should be taken in the senior year		8
Total Credits		**40**

[1] PHIL 495 Tutorial Reading and PHIL 795 Independent Study normally do not count toward fulfilling major requirement credits; exceptions may be granted by special permission.

Political and Legal Philosophy Option Requirements

This option requires **four (4)** Philosophy courses **(for a total of 16 credits)** from those listed below. Any of these courses can also count toward the general requirements of the Philosophy major, for example, by counting three of these courses as the elective courses required for the major.

Code	Title	Credits
Requirements		
Select four courses from the following:		16
PHIL 405	Critical Thinking	
PHIL 419	Race, Gender and Social Justice	
PHIL 420	Introduction to Philosophy of Law and Justice	
PHIL 424	The Future of Humanity: Science, Technology, and Society	
PHIL 430	Ethics and Society	
PHIL 431	Business Ethics	
PHIL 436	Social and Political Philosophy	
PHIL 450	Environmental Ethics	
PHIL 510	Philosophy and Feminism	
PHIL 531	Topics in Professional and Business Ethics	
PHIL 620	20th Century European Philosophy	
PHIL 630	Neuroscience and Philosophy	
PHIL 660	Law, Medicine, and Ethics	
PHIL 701	(by permission)	
PHIL 780	Special Topics (by permission)	

Note that it is in the nature of 700-level seminars to presuppose by default that students have completed the main 400-level and 500-level core requirements (PHIL 412 Beginning Logic, PHIL 500 Workshop, PHIL 530 Ethics, PHIL 570 Ancient Philosophy, PHIL 580 Modern Philosophy from Descartes to Kant) and so free reference is made to materials, views, techniques, etc. covered in those lower-level core requirements.

Discovery Requirements

For students majoring in only philosophy: philosophy majors may "double count" any two courses toward the major and also to satisfy Discovery requirements. For example, a philosophy major can count (1) PHIL 412 Beginning Logic toward the major requirement as well as using this course to satisfy the Quantitative Reasoning Discovery Category and (2) they can also count PHIL 421 Philosophy and the Arts toward both the major and the Fine and Performing Arts Discovery Category. Because PHIL 412 Beginning Logic and PHIL 570 Ancient Philosophy are required for the major and also satisfy Quantitative Reasoning and Humanities Categories, respectively, all majors could simply count these two courses toward their Discovery requirements. In various circumstances—for instance if a student already satisfied those Discovery requirements before becoming a philosophy major—one might prefer to count other philosophy courses toward different Discovery Categories, and they are free to do so.

For students double majoring with philosophy: The Department sets no limits on how many courses students may "double count" toward both the philosophy major and Discovery categories if philosophy is your **second** major. A double major with philosophy as the second major could in principle count any of the following courses toward the major while satisfying five Discovery Categories:

1. **Quantitative Reasoning (QR)** Discovery Category could be satisfied by PHIL 412 Beginning Logic.
2. **Fine and Performing Arts (FPA)** Discovery Category could be satisfied by PHIL 421 Philosophy and the Arts.

3. **Humanities (HUMA)** Discovery Category could be satisfied by PHIL 401 Introduction to Philosophy, PHIL 405 Critical Thinking, PHIL 410 Happiness, Well-Being , and a Good Life, PHIL 419 Race, Gender and Social Justice, PHIL 420 Introduction to Philosophy of Law and Justice, PHIL 430 Ethics and Society, PHIL 431 Business Ethics, PHIL 436 Social and Political Philosophy, PHIL 440A Honors/ Who Are You? Personal Identity and Humanity, PHIL 440B Honors/ Who's Human Now?, PHIL 510 Philosophy and Feminism, PHIL 525 Existentialism, PHIL 531 Topics in Professional and Business Ethics, or PHIL 570 Ancient Philosophy.
4. **World Cultures (WC)** Discovery Category could be satisfied by PHIL 440C Honors/The Copernican Lens: Finding a Place for Humanity or PHIL 520 Introduction to Eastern Philosophy.
5. **Environment, Technology, and Society (ETS)** Discovery Category could be satisfied by PHIL 424 The Future of Humanity: Science, Technology, and Society, PHIL 435 Human Nature and Evolution, PHIL 447 A.I., Robots, and People, or PHIL 450 Environmental Ethics.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
BA Language Course		4
Discovery Course		4
Discovery Course		4
Advising Seminar		1
	Credits	**17**
Spring		
BA Language Course		4
Discovery Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
PHIL 500	Workshop	4
PHIL Elective Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 412	Beginning Logic	4
PHIL 530	Ethics	4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Third Year		
Fall		
PHIL 570	Ancient Philosophy	4
PHIL Elective Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 580	Modern Philosophy from Descartes to Kant	4
PHIL Elective Course		4
Discovery Course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Fourth Year		
Fall		
PHIL 700-level Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
PHIL 700-level Course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

UNH philosophy majors acquire the ability to think systematically and imaginatively about fundamental and enduring issues such as morality, justice, happiness, beauty, gender, race, nature, artificial intelligence, space, time, and the meaning of life and death. Our internationally-renowned professors emphasize discussion, debate and writing in our courses. Wrestling with the "big questions" from diverse and global perspectives prepares students exceptionally well for a variety of fulfilling careers. Cultivating a lively and nurturing community personally invested in the success of our high achieving students, we take pride in watching our graduates excel in top law and graduate schools, innovative social justice programs, and various positions from Wall Street to Silicon Valley.

The main way we oversee student progress is through close mentorship, early on in our 2nd year orientation designed for new majors (PHIL 500 Workshop), and culminating in their presentation of research in two required 700-level seminars. We also strongly encourage participation in the annual Philosophy Department Undergraduate Research Conference.

Program Learning Outcomes

- Students understand major philosophers and philosophical ideas accurately.
- Students apply their understanding of ideas in novel contexts.
- Students write effectively.
- Students speak effectively.
- Students argue with depth, precision, balance, and insight.
- Students understand the formal structure of arguments and understand rules of inference.
- Students read analytically, critically, and empathetically.

- Students critically assess their own preconceptions, commitments and ideas.

Philosophy Minor

https://www.unh.edu/program/minor/philosophy

Description

UNH philosophy minors acquire the ability to think systematically and imaginatively about fundamental and enduring issues such as morality, justice, happiness, beauty, gender, race, nature, artificial intelligence, space, time, and the meaning of life and death. Our internationally-renowned professors emphasize discussion, debate and writing in our courses. Wrestling with the "big questions" from diverse and global perspectives will prepare you exceptionally well for a variety of fulfilling careers. A lively and nurturing community personally invested in the success of our high achieving students, we take pride in watching our graduates excel in top law and graduate schools, innovative social justice programs, and various positions from Wall Street to Silicon Valley and beyond that seek hard workers who can think rigorously and communicate clearly.

Requirements

Academic policies related to Minors.

- The philosophy minor consists of completing five (5) philosophy courses (20 credits).

Required Courses

Code	Title	Credits
PHIL course at 500-level or higher		4
Four elective PHIL courses		16
Total Credits		**20**

PHIL 495 Tutorial Reading and PHIL 795 Independent Study may be used towards the minor only with special approval.

Political Science & International Affairs (PSIA)

The study of political science includes the study of politics, power, and governance. Students have the opportunity to study both formal and informal institutions of government, political behavior, civil society, public policy, international relations, democratization, crime and punishment, political economy, and comparative political development. Political science provides a strong foundation for informed citizenship and civic engagement. The study of political science is particularly valuable to students planning to enter local, state, or national government; the Foreign Service; law school and the legal profession; non-governmental organizations; political campaigns; and careers in the security/intelligence sector. The major also enhances cognitive abilities, writing, public speaking, critical thinking, and analytical skills.

Internships and Advanced Study

In addition to regularly scheduled courses, the department offers advanced study in Political Science and International Affairs, internships, and experiential learning. Interested students should contact our department advisor, Heather Austin (heather.austin@unh.edu), to learn about the course offerings for a given semester.

Students have engaged in exciting internship opportunities that explore various aspects of government, policy-making, the legal system, and interest groups. These internships provide students with the opportunity to engage with issues at the local, state, national, and international levels. Students must have junior or senior standing and normally have a 3.2 grade point average (GPA) or higher to be eligible for consideration. Students interested in internships should consult with faculty or our department advisor.

Political Science Language Requirement

The bachelor of arts degree at the University of New Hampshire requires that a student satisfy the foreign language proficiency requirement. See Foreign Language Requirement (p. 45) for the full description of this requirement.

The Department of Political Science does not allow American Sign Language (ASL) to count toward the language requirement.

Exceptions to this must be petitioned and approved by the Department of Political Science and International Affairs' undergraduate committee and the student's advisor.

Accelerated M.A. Degree Program

The Accelerated MA program aims to:

1. Improve opportunities for excellent undergraduates to prepare for competitive Ph.D. programs or add an additional credential before entering a competitive job market; and
2. Allow students interested in politics to advance and further specialize their political science education in only one additional year at UNH.

Students must fulfill all programmatic requirements for the current master's degree program, as well as fulfill all programmatic requirements for their bachelor's degree. Students may double-count up to 12 undergraduate credits (i.e., 3 courses) toward the completion of the MA degree.

Interested students must submit a full graduate application by February 15 of their junior year. Minimum GPA required for admission is 3.2.

For additional information you may contact the graduate coordinator, Prof. Mary Malone (mary.malone@unh.edu) or Heather Austin (heather.austin@unh.edu), (603) 862-1767.

https://cola.unh.edu/political-science

Programs

- Global Studies Dual Major (p. 327)
- Global Studies Minor (p. 329)
- International Affairs Major (B.A.) (p. 329)
- International Security Minor (p. 331)
- Political Science Major (B.A.) (p. 332)
- Political Science Major: International Security Option (B.A.) (p. 334)
- Political Science Major: Law 3+3 Option (B.A.) (p. 337)
- Political Science Minor (p. 340)
- Survey Research Minor (p. 340)

Faculty

Political Science and International Affairs Department Faculty

Global Studies Dual Major

https://www.unh.edu/program/dual-major/global-studies

Description

The Global Studies dual major complements and adds a global dimension to any major at UNH. The completion of the dual major requires no additional credits for graduation beyond the 128 required of all UNH students.

Note: The Department of Civil Engineering has developed a dual-major program in civil engineering and Global Studies. Students do not need to have pre-existing skills in a foreign language before coming to UNH.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes, if primary major is a Bachelor of Arts

Declared Primary Major

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Global Studies Dual Major Requirements

All coursework required for Global Studies must be completed with a grade of C or better.

Students who wish to declare the Global Studies dual major must earn a C or better in IA 401, have declared a primary major, and have a 2.5 cumulative grade-point average. Students are expected to maintain at least a 2.5 grade-point average, the minimum required for study abroad at UNH.

Code	Title	Credits
Required Core Courses		
IA 401	Foundations of International and Global Studies	4
IA 501	From Ideas to Evidence: Researching Global Issues	4
IA 701	Investigating the World: Seminar in International Affairs and Global Studies	4
Select one of the following:		4
ECON 401	Principles of Economics (Macro)	
ECON 402	Principles of Economics (Micro)	
NR 411	Environmental and Resource Economics Perspectives	
Global Studies Language Requirement [1]		variable
International Experience - Study Abroad [2]		variable
Electives - see list below		
Select one course from each category list, plus one more course from either category (3 courses total):		12
Politics, Culture, & History		
Science, Environment, Economy, & Health		

1 **Global Studies Language Requirement**
GS majors must demonstrate functional reading, writing, and speaking ability equivalent to intermediate II (level 504 at UNH). Students may take placement tests to establish proficiency. Native second language speakers are exempt from this requirement - speak to a GS advisor. Language study may be pursued at UNH; through study abroad in the summer, J-term, or academic year; or through transfer credits from other institutions with the permission of an GS advisor.

2 **International Experience - Study Abroad**
The international experience must be a minimum of eight weeks and is usually completed prior to taking IA 701 Investigating the World: Seminar in International Affairs and Global Studies. Students may spend an academic year, semester, or summer taking classes in an academic institution, doing an internship with a private or public organization, or conducting purposeful travel/research independently. Students must meet with the Study Abroad Advisors at the Global Education Center to plan their international experience, typically a year in advance of study abroad.

Electives (three total)

- Select one elective course from the Politics, Culture, and History category list.
- Select one elective course from the Science, Environment, Economy and Health category list.
- Select one additional elective course from either category list.

Electives are offered across the university and may be used to fulfill Discovery, Honors Program and/or other minor requirements. Up to 8 credits may be double counted between your primary major and the dual major. Additional courses taken in the primary major may count for the dual major if the courses are not counted toward the primary major requirements. Electives may be taken at UNH, during the international experience, or transferred from another university with the permission of the Global Studies advisor.

Code	Title	Credits
Politics, Culture, & History Electives		
Select from the following courses:		
ANTH 411	Global Perspectives on the Human Condition: An Introduction to Anthropology (or ANTH 411H)	
or ANTH 411W	Global Perspectives on the Human Condition: An Introduction to Anthropology	
ANTH 500	Peoples and Cultures of the World (area specific) [1]	
ANTH 501	World Archaeological Cultures	
ANTH 640	Anthropology of Islam: Muslims' Everyday Lives in Contemporary Communities	
ANTH 697	Special Topics	
ARTH 674	Greek Art and Architecture	
ARTH 678	Romanesque and Gothic Art	
ARTH 681	Early Renaissance Art	
ARTH 682	The High Renaissance	
ARTH 688	Histories of Late 19th & 20th Century European Modernism	
ARTH 695	Topics in Art History	
CHIN 425	Introduction to Chinese Culture	
CLAS 403	Introduction to Greek Civilization	
CLAS 404	Introduction to Roman Civilization	
CLAS 510	Building Rome	
CLAS 520D	Classical Society, Politics and Ethics: Greek and Roman Religion	
CLAS 550A	Identities and Difference in the Ancient World: Greek and Roman Women	
FREN 525	A Road Trip Through France: Baguette, Brie, Bordeaux, and Beyond	
FREN 651	Love, War, and Power in French Literature	
FREN 652	Greatest Hits of French	
FREN 676	Topics in Francophone Culture	

GCHS 710	Conflict & Human Security
GCHS 720	Global Governance
GEOG 401	World Regions: Europe and the Americas
GEOG 402	World Regions: Asia and Africa
GEOG 530	China: People, Politics and Economy
GEOG 550	Sub-Saharan Africa: Environmental Politics and Development
GERM 525	Introduction to German Culture and Civilization
GERM 797	Special Studies in German Language and Literature
GERM 798	Special Studies in German Language and Literature
HIST 421	World History to the 16th Century
HIST 422	World History in the Modern Era
HIST 425	Foreign Cultures (area specific; or HIST 425H) [1]
HIST 436	Europe and the Modern World (or HIST 436H)
or HIST 436W	Europe and the Modern World
HIST 440D	Honors/Citizens and Persons
HIST 440F	Honors/Islam, Art, and the Past
HIST 444J	Honors/Global Citizenship: In Pursuit of Liberty
HIST 483	History of World Religions
HIST 498	Explorations of Historical Perspectives
HIST 532	Modern Latin America
HIST 537	Espionage and History
HIST 560	Modern Britain
HIST 563	Introduction to Russian Culture and Civilization
HIST 565	Women in Modern Europe
HIST 566	Comparative Revolutions: How to Make a Revolution in the World before Marx
HIST 575	Ancient Near East
HIST 585	Medieval Islam
HIST 588	History of Modern Africa: 1870 to the Present
HIST 595	Explorations
HIST 600	Explorations [1]
HIST 609	Special Topics in American Legal History
HIST 619	Foreign Relations of the United States
HIST 620	Foreign Relations of the United States
HIST 632	Latin American History: Topics [1]
HIST 633	Medieval England 800-1300
HIST 641	Europe after the Black Death
HIST 656	Twentieth Century Europe
HIST 675	History of Ancient Greece
HIST 676	Topics in Ancient Greek History
HIST 677	History of Ancient Rome
HIST 678	Topics in Ancient Roman History
HIST 690	Seminar: Historical Expl
HIST 797	Colloquium
HUMA 510A	Ancient Humanities: Cultures and Empires
HUMA 510B	Ancient Humanities: Cultures and Empires
HUMA 510C	Ancient Humanities: Cultures and Empires
HUMA 511A	Medieval Humanities: Rise of Global Empires
HUMA 511B	Medieval Humanities: Rise of Global Empires
HUMA 511C	Medieval Humanities: Rise of Global Empires
HUMA 512A	Modern Humanities: Colonies, Constitutions, and Capital
HUMA 512B	Modern Humanities: Colonies, Constitutions, and Capital
HUMA 512C	Modern Humanities: Colonies, Constitutions, and Capital
ITAL 425	Introduction to Italian Studies
ITAL 444A	Italians Come to America: Representing Emigration and Immigration on Both Sides of the Atlantic
ITAL 444B	Mamma Mia! Italian Motherhood from the Virgin Mary to Carmela Soprano
ITAL 522	Modern and Contemporary Italian Culture
ITAL 525	Italian Cinema
ITAL 651	Introduction to Italian Culture and Civilization I: Middle Ages, Renaissance, Baroque
ITAL 652	Introduction to Italian Culture and Civilization II: Age of Enlightenment, Romanticism, Modernism
ITAL 681A	Ancient and Medieval Italy
ITAL 681B	Ancient and Medieval Italy
LING 606	Languages of the World
LLC 535A	Professional Culture in Europe
PHIL 520	Introduction to Eastern Philosophy
PHIL 620	20th Century European Philosophy
POLT 403	United States in World Affairs
POLT 404	Introduction to Comparative Politics
POLT 544	Of Dictators and Democrats
POLT 545	People and Politics in Asia
POLT 546	Wealth and Politics in Asia
POLT 550	Comparative Government and Society
POLT 552	Contemporary European Politics
POLT 554	Revolution and Protest in Latin America
POLT 556	Politics in China
POLT 559	Comparative Politics of the Middle East
POLT 560	World Politics
POLT 562	Strategy and National Security Policy
POLT 569	The Rise of China
POLT 588	Selected Topics in Comparative Politics
POLT 592	Selected Topics in International Politics
POLT 740	States and Societies in the Middle East
POLT 748	Food and Wine Politics
POLT 760	Theories of International Relations
POLT 778	International Organization
POLT 797E	Seminar in International Politics
RUSS 521W	Devils, Deities, and Madness in Russian Literature
RUSS 525	Russia: Mythology and Propaganda
SOC 444A	Honors/Society in the Arctic
SOC 693	Global Change and Social Sustainability
SPAN 525	Introduction to Spanish Cultures
SPAN 526	Introduction to Latin American Cultures
SPAN 647	Topics in Hispanic Cultural Studies
SPAN 654	Introduction to Latin American Literature and Thought
Science, Environment, Economy, & Health Electives	
Select from the following courses:	
ANTH 610	Medical Anthropology: Illness and Healing
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa
BIOL 520	Our Changing Planet
CEE 520	Environmental Pollution and Protection: A Global Context
CHBE 410	Energy and Environment
CLAS 540A	Environment, Technology and Ancient Society: Sustaining Ancient Rome Ecology and Empire
CLAS 540B	Environment, Technology and Ancient Society: Roman Houses, Domestic Space and Public Life
CLAS 540C	Environment, Technology and Ancient Society: Tech, Tools and Engineering in the Ancient World
CMN 670	From Silicon Valley to Foxconn: Global Digital Capitalism
CMN 696W	Seminar in Media Studies
ECON 645	International Economics
ECON 655	Innovation in the Global Economy
ENGL/LING 606	Languages of the World
NR 444	The New Pirates of the Caribbean
ESCI 405	Global Environmental Change
GEOG 560	Natural Hazards and Human Disasters
GEOG 581	Society, Environment and Justice
GEOG 582	Global Trade and Local Development
GEOG 670	Climate and Society
GEOG 673	From Political Ecology to Climate Justice
HIST 522	Science in the Modern World
HIST 654	Topics in History of Science
HMGT 570	International Food and Culture
HMGT 771	International Wine and Beverage
HMP 715	Environmental Health
ITAL 635	Italian Food Studies
ITAL 675	Special Topics in Italian Studies
JUST 405	Technology, Crime, and Society: A Forensic Exploration of High-Tech and Digital Crime
LING 779	Linguistic Field Methods
MGT 755	Managing Business and People Across Borders
MKTG 760	International Marketing
NR 415	Natural Resources Field Methods
NR 435	Contemporary Conservation Issues and Environmental Awareness
or NR 435H	Honors/Contemporary Conservation Issues and Environmental Awareness
NR 606	International Energy Topics
NR 720	International Environmental Politics and Policies for the 21st Century

NR 784	Sustainable Living - Global Perspectives
PHIL 424	The Future of Humanity: Science, Technology, and Society
or PHIL 424H	Honors/The Future of Humanity: Science, Technology, and Society
POLT 444	Politics and Policy in a Warming World
POLT 568	International Security
POLT 592	Selected Topics in International Politics
POLT 751	Comparative Environmental Politics and Policy
POLT 762	International Political Economy
SOC 565	Environment and Society
SOC 665	Environmental Sociology
SW 625	Social Welfare Policy: Analysis, Activism, and Advocacy
TOUR 510	Tourism and Global Understanding

[1] Check with GS/IA Program Assistant

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate intermediate level proficiency in a foreign language;
- Apply different disciplinary approaches to the study of international affairs, including key themes and theoretical frameworks employed in these disciplines;
- Use critical thinking skills to analyze and discuss important global issues;
- Engage with cultural diversity and complexity through the international experience;
- Demonstrate familiarity with different types of data and sources and their appropriate use in analyzing selected topics in international affairs;
- Demonstrate competence in research design. Students will develop inquiry-based research questions, conduct a literature review, employ appropriate methods and data collection, and interpret their findings accurately.

Global Studies Minor

https://www.unh.edu/program/minor/global-studies

Description

The Global Studies (GS) minor adds a recognized distinction and global context to your primary major at UNH. It was developed for those students who, due to the demands of their primary majors, are unable to complete the more rigorous requirements of the GS dual major.

Requirements

Academic policies related to Minors.

Students must earn a C or better in all GS course requirements and have a 2.5 cumulative grade-point average.

Code	Title	Credits
Required Core Courses		
IA 401	Foundations of International and Global Studies	4
Select one course from the following:		4
ECON 401	Principles of Economics (Macro)	
ECON 402	Principles of Economics (Micro)	
NR 411	Environmental and Resource Economics Perspectives	
Global Studies Language Requirement [1]		4
International Experience - Study Abroad [2]		
Electives		
Select one course from each category list (2 courses total): [3]		8
Politics, Culture, & History		
Science, Environment, Economy, & Health		
Total Credits		**20**

[1] **Global Studies Language Requirement**
Functional reading, writing, and speaking ability equivalent to a first-year, second-semester college level (402). Students may take placement tests to establish equivalency, include language study during the international experience, or transfer credits from other institutions.

[2] **International Experience - Study Abroad**
Minimum of three weeks (or 4 credits). The international experience may include study, directed research, internship or service/volunteer experience abroad. Students should plan with the study abroad advisors (study.abroad@unh.edu) to plan for their international experience well in advance.

[3] See elective category lists under the Global Studies dual major heading. Elective courses may count toward Discovery, Honors, Writing Intensive and major requirements.

International Affairs Major (B.A.)

https://www.unh.edu/program/bachelor-arts/international-affairs

Description

International affairs is the focused study of global issues, drawing on approaches from political science, history, economics, anthropology and related fields. Students acquire the substantive knowledge, practical skills, and real-world experience to address critical issues in international affairs, such as war and diplomacy, climate change and biodiversity, human rights and women's rights, refugees and migration, and inequality and poverty.

Students can focus their studies in one of the following thematic tracks: global development and environment; international security; global ethnic, race, and diversity studies; global health and education; regional or transnational studies in the Middle East, Latin America, Africa, or Asia. The major in IA thus provides students theoretical approaches grounded in the empirical study of places and peoples.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

All majors must complete 40 credit hours of IA core courses and departmentally approved IA electives, with a grade of C- or better and a grade point average of 2.5 or better.

International Affairs majors may use two major-required courses to satisfy two Discovery Program category requirements.

Code	Title	Credits
Core Courses		
IA 401	Foundations of International and Global Studies	4
IA 501	From Ideas to Evidence: Researching Global Issues	4
IA 701	Investigating the World: Seminar in International Affairs and Global Studies	4
Select one introductory course from the following:		4
ANTH 411	Global Perspectives on the Human Condition: An Introduction to Anthropology	
EDUC 402	Introduction to Educational Studies: Social Change and Education in Local and Global Contexts	
GEOG 401	World Regions: Europe and the Americas	
GEOG 402	World Regions: Asia and Africa	
HIST 421	World History to the 16th Century	
HIST 422	World History in the Modern Era	
POLT 403	United States in World Affairs	
POLT 404	Introduction to Comparative Politics	
Select one of the following options:		8
Option A:		
Two courses in a world language [1]		
Option B:		
One course in Quantitative Reasoning and one course in Economics from the below		
Quantitative Reasoning courses		
MATH 439	Statistical Discovery for Everyone	
POLT 595	Smart Politics	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	
Economics courses		
ECON 401	Principles of Economics (Macro)	
ECON 402	Principles of Economics (Micro)	
NR 411	Environmental and Resource Economics Perspectives	
Electives		
Select three courses in a specific regional or thematic track from the below elective course list. [2]		12
Capstone		
Select one of the following:		variable
Study Abroad		
Internship with International Dimension		
600/700 level course from one of the thematic tracks		
**********		
ELECTIVE COURSES AND THEMATIC TRACKS		
Regional and Transnational Studies Track		
Select three courses in a COLA interdisciplinary area studies minor from the following:		
-Africana Studies Minor		
-Asian Studies Minor		
-Latin American, Latinx and Caribbean Studies Minor		
-Middle Eastern Studies Minor		
Global Development and Environment Track		
Select three courses from the following:		
CMN 670	From Silicon Valley to Foxconn: Global Digital Capitalism	
EDUC 520	Education, Poverty, and Development	
ENGL 736	Environmental Theory	
GEOG 550	Sub-Saharan Africa: Environmental Politics and Development	
GEOG 560	Natural Hazards and Human Disasters	
HIST 609	Special Topics in American Legal History	
HIST 690	Seminar: Historical Expl	
HIST 797	Colloquium	
POLT 546	Wealth and Politics in Asia	
POLT 549	The Politics of Markets	
POLT 550	Comparative Government and Society	
POLT 556	Politics in China	
POLT 751	Comparative Environmental Politics and Policy	
POLT 762	International Political Economy	
SOC 693	Global Change and Social Sustainability	
Global Ethnic, Race, and Diversity Studies Track		
Select three courses from the following:		
ANTH 500	Peoples and Cultures of the World	
ANTH 513	Ethnographic Methods	
CLAS 550B	Identities and Difference in the Ancient World: Slaves and Masters	
CMN 620W	Global Media, Culture, and Power	
CMN 596	Special Topics in Media Studies	
CMN 772	Seminar in Media Theory	
EDUC 550	Language and Linguistic Diversity in Schools	
EDUC 525	The Idea of Race in Teaching and Learning	
ENGL 581	Reading the Postcolonial Experience	
HIST 483	History of World Religions	
HIST 588	History of Modern Africa: 1870 to the Present	
POLT 440A	Honors/Global Justice	
POLT 551	Ethnicity ,Violence, Democracy	
POLT 588	Selected Topics in Comparative Politics	
International Security Track		
Select three courses from the following:		
HIST 498	Explorations of Historical Perspectives	
HIST 537	Espionage and History	
HIST 609	Special Topics in American Legal History	
HIST 620	Foreign Relations of the United States	
HUMA 525	Humanities and the Law	
POLT 545	People and Politics in Asia	
POLT 559	Comparative Politics of the Middle East	
POLT 560	World Politics	
POLT 562	Strategy and National Security Policy	
POLT 566	International Security in Asia	
POLT 568	International Security	
POLT 569	The Rise of China	
POLT 592	Selected Topics in International Politics	
POLT 740	States and Societies in the Middle East	
POLT 742	Beyond Bollywood: Politics of India & South Asia	
POLT 760	Theories of International Relations	
POLT 778	International Organization	
POLT 797E	Seminar in International Politics	
Global Health and Education Track		
Select three courses from the following:		
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa	
EDUC 520	Education, Poverty, and Development	
EDUC 525	The Idea of Race in Teaching and Learning	
EDUC 550	Language and Linguistic Diversity in Schools	
EDUC 605	Educational Perspectives in Critical Times	
HIST 437H	Honors/The Mad Among Us: A Global History of Mental Disorder	
HIST 440E	Honors/Drugs and Addiction in World History	
HIST 498	Explorations of Historical Perspectives	
POLT 548	Drug Wars	

1 **International Affairs Language Requirement**
Students must take a minimum of two language courses and reach level 504 (intermediate II) in the language of their choosing. Students who have reached level 504 with one language course must substitute another course (from the approved list) in order to fulfill the required 40 credit hours for the major. Language study may be pursued at UNH; through study abroad in the summer, J-term, or academic year; or through transfer credits from other institutions with the permission of an IA advisor. Native speakers of a language other than English may fulfill this requirement with alternative classes by permission - please discuss with an IA advisor.

2 We highly recommend that students select all three elective courses within the same track to develop a more focused and cohesive area of study. However, students with diverse interests in international affairs

may choose electives from different tracks to broaden their academic experience.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
Language 401		4
IA 401	Foundations of International and Global Studies	4
Discovery Course		4
First Year Seminar		1
	Credits	**17**
Spring		
Language 402		4
Introductory Course from a discipline		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
Option A or B Course		4
IA 501	From Ideas to Evidence: Researching Global Issues	4
IA Elective 1		4
Elective [1]		4
	Credits	**16**
Spring		
Option A or B Course		4
IA Elective 2		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
IA Elective 3		4
Elective [1]		4
Elective [1]		4
Discovery Course		4
	Credits	**16**
Spring		
IA 701	Investigating the World: Seminar in International Affairs and Global Studies	4
Discovery Course		4
Elective [1]		4
Elective [1]		4
	Credits	**16**
Fourth Year		
Fall		
IA Capstone [2]		4
Discovery Course		4
Elective [1]		4
Elective [1]		4
	Credits	**16**
Spring		
Elective [1]		4
Elective [1]		4
Elective [1]		4
Discovery Course		4
	Credits	**16**
	Total Credits	**129**

1. Electives can be courses towards a minor, second major, or other experiences to supplement the primary major and should be selected in consultation with an advisor.
2. IA Capstone can be an internship, study abroad, or an addition 700-level course, depending on the student's interests and timeline, and are selected in consultation with an advisor. The exact timing of an IA Capstone often varies depending on these factors.

Student Learning Outcomes

Program Learning Outcomes

- Apply different disciplinary approaches to the study of international affairs, including key themes and theoretical frameworks employed in these disciplines;
- Use critical thinking skills to analyze and discuss important global issues;
- Engage with cultural diversity and complexity through the international experience;
- Demonstrate familiarity with different types of data and sources and their appropriate use in analyzing selected topics in international affairs;
- Demonstrate competence in research design. Students will develop inquiry-based research questions, conduct a literature review, employ appropriate methods and data collection, and interpret their findings accurately.

International Security Minor

https://www.unh.edu/program/minor/international-security

Description

The International Security minor will provide students with the opportunity to explore the many dimensions of international security through course work in political science, history, and other closely-related disciplines. Students will work with and learn from faculty conducting novel research on topics such as: the arms trade, ethnic conflict, drug-

related violence, human security, and conflicts in regions throughout the war.

Students who successfully complete this major will be well-versed in contemporary international security issues and will learn critical thinking and analysis skills applicable to a wide range of careers. Leaders at all levels count on staff with analytical skills who can communicate effectively with policy-makers. Career paths open to our graduates include: the foreign service, intelligence agencies, international organizations, the UN, journalism, think tank research, law, risk analysis, and business.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits).

- Students must receive a grade of C or better for a course to count toward the minor requirements.
- Political science majors pursuing the minor can only double count up to two of the three required Political Science courses below. The third required course must be taken in addition to courses taken to fulfill major requirements.

Code	Title	Credits
Required Course		
Select one core POLT course from the following:		4
POLT 560	World Politics	
POLT 562	Strategy and National Security Policy	
POLT 568	International Security	
Electives		
Select four courses from the following:		16
POLT 403	United States in World Affairs	
POLT 404	Introduction to Comparative Politics	
POLT 513	Civil Rights and Liberties	
POLT 545	People and Politics in Asia	
POLT 546	Wealth and Politics in Asia	
POLT 548	Drug Wars	
POLT 551	Ethnicity ,Violence, Democracy	
POLT 554	Revolution and Protest in Latin America	
POLT 556	Politics in China	
POLT 559	Comparative Politics of the Middle East	
POLT 560	World Politics [1]	
POLT 562	Strategy and National Security Policy [1]	
POLT 566	International Security in Asia	
POLT 568	International Security [1]	
POLT 569	The Rise of China	
POLT 588	Selected Topics in Comparative Politics	
POLT 592	Selected Topics in International Politics	
POLT 595	Smart Politics	
POLT 740	States and Societies in the Middle East	
POLT 742	Beyond Bollywood: Politics of India & South Asia	
POLT 751	Comparative Environmental Politics and Policy	
POLT 760	Theories of International Relations	
POLT 762	International Political Economy	
POLT 778	International Organization	
POLT 797C	Seminar in Comparative Politics	
POLT 797E	Seminar in International Politics	
CMN 456	Propaganda and Persuasion	
CS 408	Living in a Networked World: The Good, the Bad, and the Ugly	
GEOG 670	Climate and Society	
HIST 537	Espionage and History	
HIST 619	Foreign Relations of the United States	
HIST 620	Foreign Relations of the United States	
HUMA 525	Humanities and the Law	
IA 501	From Ideas to Evidence: Researching Global Issues	
JUST 405	Technology, Crime, and Society: A Forensic Exploration of High-Tech and Digital Crime	
SOC 450	Contemporary Social Problems	
SOC 693	Global Change and Social Sustainability	
Total Credits		**20**

[1] If not selected to fulfill the core required course.

Political Science Major (B.A.)

https://www.unh.edu/program/bachelor-arts/political-science

Description

The study of government and politics, to which the courses and seminars of the Department of Political Science are devoted, includes the development of knowledge of political behavior by individuals and groups as well as knowledge about governments: their nature and functions, their problems and behavior, and their interactions—at the national and international levels as well as local, state, and regional levels.

Much of the learning offered by the Department of Political Science can also be regarded as essential for good citizenship, since political knowledge helps to explain the formal and informal institutions by which we are governed and the forces that lead to policy decisions, and also seeks to clarify the issues and principles that encourage people toward political involvement. In addition, such learning is especially valuable to students planning to enter local or national government or other public service related fields, including the Foreign Service, and it will be of great help to those who intend to study law and enter the legal profession. For teaching, particularly at the college level, and for many types of government service, graduate work may be indispensable. An undergraduate major in political science will provide a helpful foundation for any further study of politics and related fields in the social sciences and humanities. Such an emphasis will also be valuable for students seeking careers in journalism, international organizations, and the public affairs and administrative aspects of labor, financial, and business organizations.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The major in political science consists of at least 10 courses (40 credits) and not more than 12 courses (48 credits).

The minimum grade requirement is C- per course. Any grade lower than a C- will not count toward the major. The required minimum overall GPA for major coursework is 2.0.

Political Science majors may use one major-required course to satisfy one Discovery category requirement.

Code	Title	Credits
Required Courses		
Select three introductory courses from the following:		12
POLT 401	Politics and Society [1]	
POLT 402	American Politics and Government [1]	
POLT 403	United States in World Affairs [1]	
POLT 404	Introduction to Comparative Politics	
Select Six 500-level Courses		
Select three (3) subfield courses, one course from each of three different subfields below.		12
Select three (3) elective courses from any of the five subfields below. [2]		12
Subfield: American Politics		
POLT 500	American Public Policy	
POLT 502	State and Local Government	
POLT 504	American Presidency	
POLT 505	American Congress	
POLT 506	Parties, Interest Groups, and Voters	
POLT 507	Politics of Crime and Justice	
POLT 508	Supreme Court and the Constitution	
POLT 509	Managing Bureaucracy in America	
POLT 511	Women & Politics	
POLT 512	Public Opinion in American Politics	
POLT 513	Civil Rights and Liberties	
POLT 580	Selected Topics Am Politics	
POLT 705	Elections in the United States	
POLT 701	Courts and Public Policy	
POLT 709	Reforming American Government	
POLT 797B	Seminar in American Politics	
POLT 798B	Seminar in American Politics	
Subfield: Political Thought		
POLT 522	Dissent and the Political Community	
POLT 523	American Political Thought	
POLT 524	Politics and Literature	
POLT 584	Selected Topics in Political Thought	
POLT 721	Feminist Political Theory	
Subfield: Comparative Politics		
POLT 544	Of Dictators and Democrats	
POLT 545	People and Politics in Asia	
POLT 546	Wealth and Politics in Asia	
POLT 548	Drug Wars	
POLT 549	The Politics of Markets	
POLT 550	Comparative Government and Society	
POLT 551	Ethnicity ,Violence, Democracy	
POLT 552	Contemporary European Politics	
POLT 554	Revolution and Protest in Latin America	
POLT 556	Politics in China	
POLT 559	Comparative Politics of the Middle East	
POLT 588	Selected Topics in Comparative Politics	
POLT 740	States and Societies in the Middle East	
POLT 742	Beyond Bollywood: Politics of India & South Asia	
POLT 748	Food and Wine Politics	
POLT 751	Comparative Environmental Politics and Policy	
POLT 797C	Seminar in Comparative Politics	
Subfield: International Politics		
POLT 560	World Politics	
POLT 562	Strategy and National Security Policy	
POLT 566	International Security in Asia	
POLT 568	International Security	
POLT 569	The Rise of China	
POLT 592	Selected Topics in International Politics	
POLT 760	Theories of International Relations	
POLT 762	International Political Economy	
POLT 778	International Organization	
POLT 797E	Seminar in International Politics	
Subfield: Methods		
POLT 595	Smart Politics	
POLT 700	Political Science Pro-Seminar	
Discovery Program Capstone		
Select one 700-level POLT course		4
Total Credits		**40**

1 Once students declare the major, three of the following four courses, POLT 401, POLT 402, POLT 403, POLT 404 must be completed within the first calendar year.
Note: POLT 440A, POLT 444, POLT 444B do not count toward the major.

2 Students can take any POLT course at the intermediate level or higher (500-799) to count toward elective credit.
ECON 402 or ECON 605 and ECON 401 or ECON 611 may also be used to fulfill the fifth or sixth elective in this sequence. Additional economics courses will be considered by petition. Only one economics course can count toward this requirement. If students substitute an economics course for a POLT 500-level course, the economics course cannot be used to satisfy Discovery Program category requirements.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
POLT 401 or POLT 402 or POLT 403 or POLT 404	Politics and Society or American Politics and Government or United States in World Affairs or Introduction to Comparative Politics	4
Language 401		4
Discovery Course		4
First Year Seminar		1
	Credits	**17**
Spring		
POLT 402 or POLT 401 or POLT 403 or POLT 404	American Politics and Government or Politics and Society or United States in World Affairs or Introduction to Comparative Politics	4
POLT 403 or POLT 401 or POLT 402 or POLT 404	United States in World Affairs or Politics and Society or American Politics and Government or Introduction to Comparative Politics	4
Language 402		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
Subfield 1		4
Elective [1]		4
Discovery Course		4

Elective [1]	4
Credits	**16**
Spring	
Subfield 2	4
Major Elective 1	4
Discovery Course	4
Discovery Course	4
Credits	**16**
Third Year	
Fall	
Major Elective 2	4
Elective [1]	4
Discovery Course	4
Discovery Course	4
Credits	**16**
Spring	
Subfield 3	4
Discovery Course	4
Elective [1]	4
Elective [1]	4
Credits	**16**
Fourth Year	
Fall	
Major Elective 3	4
Discovery Course	4
Elective [1]	4
Elective [1]	4
Credits	**16**
Spring	
Major Capstone Course	4
Elective [1]	4
Elective [1]	4
Elective [1]	4
Credits	**16**
Total Credits	**129**

[1] Electives can be classes towards a minor, a second major, or other experiences to supplement your primary major and should be chosen in consultation with your advisor.

Student Learning Outcomes

Program Learning Outcomes

- Knowledge Base: a proficient knowledge base of the five subfields of Political Science including American Government, Political Theory, Comparative Politics, International Relations, and Methods. Areas of strength include the study of public opinion, comparative politics and international relations, political economy, environmental politics, Latin American politics, Middle Eastern politics, and Asian politics. In this regard, the program fosters the development of a strong empirical foundation through multiple levels of courses.
- Research Skills: A second goal is to advance the students' abilities to understand and use basic political science research skills. These include computer literacy, knowledge of credible sources of information, basic statistical applications, and support for foreign language proficiency. We also strive to help students identify interesting and important research questions clearly and concisely, gather and assess various types of information, and come to well-reasoned conclusions.
- Critical Thinking: The third objective involves enhancement of student cognitive abilities and critical thinking. We hone the ability to analyze, assess, and reconstruct findings in written, oral, and graphical form. We strive to promote students who are self-disciplined thinkers who understand the rigorous standards of research, are intelligent consumers of political information, and are able to understand and weigh multiple perspectives and interpretations.
- Communication Skills: Another aim is to enhance the written and oral communication skills of our students. We support the goals of the writing intensive requirement and expose students to different genres and conventions in academic writing. Most 500 and 700-level courses emphasize cultivating strong writing and reading skills, while at the 700-level, student engagement in sustained discussion becomes the centerpiece of instruction in many seminars. Writing instruction includes emphasis not only on research papers but on short analytical essays, précis, and reviews that ask students to synthesize complex information, develop arguments, and delve more deeply into interpretation. In some courses, part of this work includes iterated practice of grammar and stylistic choices through revision and proposal assignments.
- Professional Socialization and Support for Post-Graduate Training and Placement: The sixth aim of the program is to give students the requisite skills, preparation and knowledge base to become capable and responsible political actors in their chosen professional careers and future goals. We expect our students to be exposed to the ethics and organizational culture of political science specifically and the social sciences generally. We aim to provide a foundation of professionalism for students who enter both the private and public sectors upon graduation and for those who continue their studies beyond the B.A.
- Inspire Curiosity and Enthusiasm for Inquiry: A final goal is to foster a spirit of inquiry. Faculty in the Department hope to stimulate curiosity about the political world and inspire life-long learners who are engaged in the political process at the local, national and global levels.

Political Science Major: International Security Option (B.A.)

https://www.unh.edu/program/bachelor-arts/political-science-international-security

Description

The International Security option in major allows students to focus the electives in their Political Science major on contemporary international security issues. Topics include: terrorism, ethnic conflict, nuclear weapons, drug-related violence, human security, technology and war, and much more.

Students who elect this option can highlight their focus on international security to potential employers and graduate schools. The option in major will appear on students' transcripts. The option in major will allow

students to develop a network with students who share a passion for international security, and leverage this network at UNH and beyond.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The Political Science major option in International Security consists of at least 10 courses (40 credits).

The minimum grade requirement is C- per course. Any grade lower than a C- will not count toward the major option. The required minimum overall GPA for major coursework is 2.0.

Code	Title	Credits
Required Courses		
Select three introductory courses from the following:		
POLT 401	Politics and Society	4
POLT 402	American Politics and Government	4
POLT 403	United States in World Affairs	4
POLT 404	Introduction to Comparative Politics	4
Subfield Courses		
Select three 500-level subfield courses, one from each of three different subfields below:		12
Subfield: American Politics		
POLT 500	American Public Policy	
POLT 502	State and Local Government	
POLT 504	American Presidency	
POLT 505	American Congress	
POLT 506	Parties, Interest Groups, and Voters	
POLT 507	Politics of Crime and Justice	
POLT 508	Supreme Court and the Constitution	
POLT 509	Managing Bureaucracy in America	
POLT 511	Women & Politics	
POLT 512	Public Opinion in American Politics	
POLT 513	Civil Rights and Liberties	
POLT 580	Selected Topics Am Politics	
POLT 705	Elections in the United States	
POLT 709	Reforming American Government	
POLT 797B	Seminar in American Politics	
POLT 798B	Seminar in American Politics	
Subfield: Political Thought		
POLT 522	Dissent and the Political Community	
POLT 523	American Political Thought	
POLT 524	Politics and Literature	
POLT 584	Selected Topics in Political Thought	
POLT 721	Feminist Political Theory	
Subfield: Comparative Politics		
POLT 544	Of Dictators and Democrats	
POLT 545	People and Politics in Asia	
POLT 546	Wealth and Politics in Asia	
POLT 548	Drug Wars	
POLT 549	The Politics of Markets	
POLT 550	Comparative Government and Society	
POLT 551	Ethnicity ,Violence, Democracy	
POLT 552	Contemporary European Politics	
POLT 554	Revolution and Protest in Latin America	
POLT 556	Politics in China	
POLT 559	Comparative Politics of the Middle East	
POLT 588	Selected Topics in Comparative Politics	
POLT 740	States and Societies in the Middle East	
POLT 742	Beyond Bollywood: Politics of India & South Asia	
POLT 748	Food and Wine Politics	
POLT 751	Comparative Environmental Politics and Policy	
POLT 797C	Seminar in Comparative Politics	
Subfield: International Politics		
POLT 560	World Politics	
POLT 562	Strategy and National Security Policy	
POLT 566	International Security in Asia	
POLT 569	The Rise of China	
POLT 592	Selected Topics in International Politics	
POLT 760	Theories of International Relations	
POLT 762	International Political Economy	
POLT 778	International Organization	
POLT 797E	Seminar in International Politics	
Subfield: Methods		
POLT 595	Smart Politics	
POLT 700	Political Science Pro-Seminar	

Code	Title	Credits
International Security Option Requirements		
POLT 568	International Security	4
Electives		
Select two courses from the following:		8
POLT 548	Drug Wars	
POLT 551	Ethnicity ,Violence, Democracy	
POLT 554	Revolution and Protest in Latin America	
POLT 559	Comparative Politics of the Middle East	
POLT 562	Strategy and National Security Policy	
POLT 566	International Security in Asia	
POLT 569	The Rise of China	
POLT 592	Selected Topics in International Politics	
Capstone		
Select one course from the following:		4
POLT 740	States and Societies in the Middle East	
POLT 742	Beyond Bollywood: Politics of India & South Asia	
POLT 751	Comparative Environmental Politics and Policy	
POLT 797C	Seminar in Comparative Politics	
POLT 797E	Seminar in International Politics	

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
POLT 401 or POLT 402 or POLT 403 or POLT 404	Politics and Society or American Politics and Government or United States in World Affairs or Introduction to Comparative Politics	4
Language 401		4
Discovery Course		4

First year Seminar		1
	Credits	**17**
Spring		
POLT 402 or POLT 401 or POLT 403 or POLT 404	American Politics and Government or Politics and Society or United States in World Affairs or Introduction to Comparative Politics	4
POLT 403 or POLT 401 or POLT 402 or POLT 404	United States in World Affairs or Politics and Society or American Politics and Government or Introduction to Comparative Politics	4
Language 402		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
Subfield 1		4
POLT 568	International Security	4
Discovery Course		4
Elective [1]		4
	Credits	**16**
Spring		
Subfield 2		4
International Security Elective 1		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
International Security Elective 2		4
Elective [1]		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
Subfield 3		4
Discovery Course		4
Elective [1]		4
Elective [1]		4
	Credits	**16**
Fourth Year		
Fall		
Elective [1]		4
Discovery Course		4
Elective [1]		4
Elective [1]		4
	Credits	**16**
Spring		
International Security Capstone Course		4
Elective [1]		4
Elective [1]		4
Elective [1]		4
	Credits	**16**
	Total Credits	**129**

[1] Electives can be classes towards a minor, a second major, or other experiences to supplement your primary major and should be chosen in consultation with your advisor.

Student Learning Outcomes

Program Learning Outcomes

- Knowledge Base: a proficient knowledge base of the five subfields of Political Science including American Government, Political Theory, Comparative Politics, International Relations, and Methods. The program fosters the development of a strong empirical foundation through multiple levels of courses. The option in major allows students to focus their elective coursework on critical international security issues.
- Research Skills: A second goal is to advance the students' abilities to understand and use basic political science research skills. These include knowledge of credible sources of information, basic statistical applications, and support for foreign language proficiency. We also strive to help students identify interesting and important research questions clearly and concisely, gather and assess various types of information, and come to well-reasoned conclusions.
- Critical Thinking: The third objective involves enhancement of student cognitive abilities and critical thinking. We hone the ability to analyze, assess, and reconstruct findings in written, oral, and graphical form. We strive to promote students who are self-disciplined thinkers who understand the rigorous standards of research, are intelligent consumers of political information, and are able to understand and weigh multiple perspectives and interpretations.
- Communication Skills: Another aim is to enhance the written and oral communication skills of our students. We support the goals of the writing intensive requirement and expose students to different genres and conventions in academic writing. Most 500 and 700-level courses emphasize cultivating strong writing and reading skills, while at the 700-level, student engagement in sustained discussion becomes the centerpiece of instruction in many seminars. Writing instruction includes emphasis not only on research papers but on short analytical essays, and reviews that ask students to synthesize complex information, develop arguments, and delve more deeply into interpretation. In some courses, part of this work includes iterated practice of grammar and stylistic choices through revision and proposal assignments.
- Professional Socialization and Support for Post-Graduate Training and Placement: The sixth aim of the program is to give students the requisite skills, preparation and knowledge base to become capable and responsible political actors in their chosen professional careers and future goals. We expect our students to be exposed to the ethics and organizational culture of political science specifically and the social sciences generally. We aim to provide a foundation of professionalism for students who enter both the private and public sectors upon graduation and for those who continue their studies beyond the B.A.
- Inspire Curiosity and Enthusiasm for Inquiry: A final goal is to foster a spirit of inquiry. Faculty in the Department hope to stimulate curiosity about the political world and inspire life-long learners who

are engaged in the political process at the local, national and global levels.

Political Science Major: Law 3+3 Option (B.A.)

https://www.unh.edu/program/bachelor-arts/political-science-law-33

Description

The Political Science Law 3+3 program offers highly motivated UNH undergraduate students of Political Science the opportunity to earn both a bachelor's degree (B.A.) and a law degree (J.D.) in six, rather than seven, years of study. After completing three years as an Political Science undergraduate and gaining admission to the UNH Law School through the approved process, the 3+3 Program participant will become a full-time first year law student. Upon successful completion of the first year of law study, the credits earned will be counted toward the JD degree and as elective credits sufficient to complete UNH's requirements for the bachelor's degree.

Eligibility and Admission Process

STEP ONE: Application to the Political Science: Law 3+3 B.A./JD option.

Students apply to the program either when they submit their applications to UNH, selecting the Political Science/JD option on the online application, or after they are admitted to UNH, by applying directly to the assigned committee of the Political Science Department. In both cases, undergraduate applicants must fulfill the general requirements for admission to the Political Science major.

Students applying at the time of admission to UNH will typically present the following high school credentials:

- A 3.5 GPA in high school (UNH recalculates high school GPA's to a 4.0 weighted scale)
- A rigorous high school curriculum is defined as the following:
  - 4 years of college prep (CP) or higher English
  - 3 years of CP or higher mathematics
  - 4 years of CP or higher social studies/history
  - Completed at least level 3 of a foreign language
  - 3 or more years of CP or higher laboratory sciencs.
- A recommended score of 1200 or better (combined Math and Verbal) on the SAT or a 29 on the ACT.

Currently enrolled UNH students applying to the program must:

- Have a 3.5 GPA in college courses at the time of application.
- The Political Science Department Committee governing admission to the 3+3 program will also consider past SAT scores, maturity, and the abilitly to complete a highly demanding program of study based on performance thus far.
- For both groups, it is important to note that satisfying these requirements does not guarantee admission to this program. The review process is holistic (meaning all parts of the application carry weight and influence the final decision) and other components of the application will influence any admission decisions. Available space within the program will also influence who is admitted and how many students can be accepted.

STEP TWO: Application to UNH Law school

To be eligible, students must:

- Complete all Discovery and major requirements, and accrue at least 98 credits before beginning law school in their Senior year.
- Maintain at least a 3.5 GPA (including transfer credits) at time of application to law school, and at the end of their Junior year.
- Take the LSAT no later than February of the final undergraduate year (i.e. the Junior year) and earn a score of 155 or above. (Alternatively, students may take the GRE, on which they need to earn the following scores: verbal 156, quantitative 152, and writing 4.0.)
- Submit the law school application through the Law School Admissions Council by March 15 of the calendar year in which the student wishes to enroll in law school.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Students in the Political Science: Law 3+3 option fulfill the BA degree requirements and Political Science major. See the Degree Plan for the recommended path through the Political Science major and Juris Doctor.

Participation requires that students:

- Complete all discovery and major requirements and **at least 98 credits** before beginning law school.
- Maintain a **3.5 or above** grade point average, including transfer credits.
- Take the LSAT no later than February of the final undergraduate year and have a score of **155 or above**.
- Submit the law school application through the Law School Admissions Office by March 15 of the year in which the student would like to enroll in law school.

Political Science Major Requirements

- Students complete at least 10 courses (40 credits) and not more than 12 courses (48 credits) for the major requirements.
- Major courses must be completed with a minimum grade of C- in each course to count toward major requirements. The required minimum overall GPA in major coursework is 2.0.
- Political Science majors may use one major-required course to satisfy one Discovery category requirement.
- Candidates for a degree must satisfy all of the University Discovery and Writing Program requirements in addition to satisfying the major

requirements. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Code	Title	Credits
Required Courses		
Select three introductory courses from the following: [1]		12
POLT 401	Politics and Society	
POLT 402	American Politics and Government	
POLT 403	United States in World Affairs	
POLT 404	Introduction to Comparative Politics	
500-level Courses		
Select SIX 500-level courses as follows:		24
-Three (3) Subfield Courses (selected from three different subfields below).		
-Three (3) Elective Courses (selected from any of the five subfields below). [2]		
Subfield: American Politics		
POLT 500	American Public Policy	
POLT 502	State and Local Government	
POLT 504	American Presidency	
POLT 505	American Congress	
POLT 506	Parties, Interest Groups, and Voters	
POLT 507	Politics of Crime and Justice	
POLT 508	Supreme Court and the Constitution	
POLT 509	Managing Bureaucracy in America	
POLT 511	Women & Politics	
POLT 512	Public Opinion in American Politics	
POLT 513	Civil Rights and Liberties	
POLT 580	Selected Topics Am Politics	
POLT 701	Courts and Public Policy	
POLT 705	Elections in the United States	
POLT 709	Reforming American Government	
POLT 797B	Seminar in American Politics	
POLT 798B	Seminar in American Politics	
Subfield: Political Thought		
POLT 522	Dissent and the Political Community	
POLT 523	American Political Thought	
POLT 524	Politics and Literature	
POLT 584	Selected Topics in Political Thought	
POLT 721	Feminist Political Theory	
Subfield: Comparative Politics		
POLT 544	Of Dictators and Democrats	
POLT 545	People and Politics in Asia	
POLT 546	Wealth and Politics in Asia	
POLT 548	Drug Wars	
POLT 549	The Politics of Markets	
POLT 550	Comparative Government and Society	
POLT 551	Ethnicity ,Violence, Democracy	
POLT 552	Contemporary European Politics	
POLT 554	Revolution and Protest in Latin America	
POLT 556	Politics in China	
POLT 559	Comparative Politics of the Middle East	
POLT 588	Selected Topics in Comparative Politics	
POLT 740	States and Societies in the Middle East	
POLT 742	Beyond Bollywood: Politics of India & South Asia	
POLT 748	Food and Wine Politics	
POLT 751	Comparative Environmental Politics and Policy	
POLT 797C	Seminar in Comparative Politics	
Subfield: International Politics		
POLT 560	World Politics	
POLT 562	Strategy and National Security Policy	
POLT 566	International Security in Asia	
POLT 568	International Security	
POLT 569	The Rise of China	
POLT 592	Selected Topics in International Politics	
POLT 760	Theories of International Relations	
POLT 762	International Political Economy	
POLT 778	International Organization	
POLT 797E	Seminar in International Politics	
Subfield: Methods		
POLT 595	Smart Politics	
POLT 700	Political Science Pro-Seminar	
Capstone		
Select one 700-level POLT course		4
Total Credits		**40**

1 Once students declare the major, three of the following four courses, POLT 401, POLT 402, POLT 403 or POLT 404 must be completed within the first calendar year.

2 Note: POLT 440A, POLT 444, POLT 444B do not count toward the major. Students can take any POLT course at the intermediate level or higher (500-799) to count toward elective credit. ECON 402 Principles of Economics (Micro) or ECON 605 Intermediate Microeconomic Analysis and ECON 401 Principles of Economics (Macro) or ECON 611 Intermediate Macroeconomic Analysis may also be used to fulfill the fifth or sixth elective in this sequence. Additional economics courses will be considered by petition. Only one economics course can count toward this requirement. If students substitute an economics course for a POLT 500-level course, the economics course cannot be used to satisfy Discovery Program category requirements.

Law School

Juris Doctor (J.D.) Requirements

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
POLT 401 or POLT 402 or POLT 403 or POLT 404	Politics and Society or American Politics and Government or United States in World Affairs or Introduction to Comparative Politics	4
Discovery Course		4
LLC/Foreign Language/CHI Course		4
	Credits	**16**
Spring		
POLT 401 or POLT 402 or POLT 403 or POLT 404	Politics and Society or American Politics and Government or United States in World Affairs or Introduction to Comparative Politics	4
Discovery Course		4
Discovery Course		4
Foreign Language (or Elective Course if FL completed in one semester)		4
	Credits	**16**
Second Year		
Fall		
POLT 401 or POLT 402 or POLT 403 or POLT 404	Politics and Society or American Politics and Government or United States in World Affairs or Introduction to Comparative Politics	4

Discovery Course		4
Discovery Course		4
POLT (500-level) Course		4
	Credits	**16**
Spring		
Discovery Course		4
Discovery Course		4
POLT (500-level) Course		4
POLT (500-level) Course		4
	Credits	**16**
Third Year		
Fall		
Discovery Course		4
Discovery Course		4
POLT (500-level) Course		4
POLT (500-level) Course		4
LAW 475	Getting Ready to Succeed in Law School	2
	Credits	**18**
Spring		
POLT (500-level) Course		4
POLT Capstone Course (700-level)		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**98**

TOTAL: 98 Credits (40 Discovery, 40 Political Science, 4-8 Foreign Language, 8-12 Elective)

NEED: Beyond ENGL 401 First-Year Writing, 3 more WI courses, one in major, one at 600 level.

HONORS: It is not necessary to complete the honors program, but it is possible: Honors in Discovery + Honors in Major with Thesis.

SEQUENCE: Political Science courses don't need to be taken in any specific order; the guide above is only a suggestion. In general, 400-level courses should be taken before 500-level courses, and 500-level courses should be taken before 600-700 level ones. As long as all the categories listed above are met, students have the flexibility to choose the courses that best meet their interests and schedules.

ADVISING: It is very important that students progressing through the 3+3 Political Science/Law program maintain close contact with their degree advisor. This will help students remain "on track" to complete degree requirements, and the advisor will guide the student into the next phase of the program, admission to the Law School. Students who plan early and work closely with their advisor may find it possible to include study abroad and participation in other University programs, if desired, but only with careful planning.

Law School Degree Plan

Fourth Year/First Year Law School

Juris Doctor Sample Degree Plan

The schedule and track of the second and third years of law school are directed by each student with careful advising from the law school faculty.

Student Learning Outcomes

Program Learning Outcomes

- Knowledge Base: a proficient knowledge base of the five subfields of Political Science including American Government, Political Theory, Comparative Politics, International Relations, and Methods. Areas of strength include the study of public opinion, comparative politics and international relations, political economy, environmental politics, Latin American politics, Middle Eastern politics, and Asian politics. In this regard, the program fosters the development of a strong empirical foundation through multiple levels of courses.
- Research Skills: A second goal is to advance the students' abilities to understand and use basic political science research skills. These include computer literacy, knowledge of credible sources of information, basic statistical applications, and support for foreign language proficiency. We also strive to help students identify interesting and important research questions clearly and concisely, gather and assess various types of information, and come to well-reasoned conclusions.
- Critical Thinking: The third objective involves enhancement of student cognitive abilities and critical thinking. We hone the ability to analyze, assess, and reconstruct findings in written, oral, and graphical form. We strive to promote students who are self-disciplined thinkers who understand the rigorous standards of research, are intelligent consumers of political information, and are able to understand and weigh multiple perspectives and interpretations.
- Communication Skills: Another aim is to enhance the written and oral communication skills of our students. We support the goals of the writing intensive requirement and expose students to different genres and conventions in academic writing. Most 500 and 700-level courses emphasize cultivating strong writing and reading skills, while at the 700-level, student engagement in sustained discussion becomes the centerpiece of instruction in many seminars. Writing instruction includes emphasis not only on research papers but on short analytical essays, précis, and reviews that ask students to synthesize complex information, develop arguments, and delve more deeply into interpretation. In some courses, part of this work includes iterated practice of grammar and stylistic choices through revision and proposal assignments.
- Professional Socialization and Support for Post-Graduate Training and Placement: The sixth aim of the program is to give students the requisite skills, preparation and knowledge base to become capable and responsible political actors in their chosen professional careers and future goals. We expect our students to be exposed to the ethics and organizational culture of political science specifically and the social sciences generally. We aim to provide a foundation of professionalism for students who enter both the private and public sectors upon graduation and for those who continue their studies beyond the B.A.
- Inspire Curiosity and Enthusiasm for Inquiry: A final goal is to foster a spirit of inquiry. Faculty in the Department hope to stimulate curiosity about the political world and inspire life-long learners who are engaged in the political process at the local, national and global levels.

Political Science Minor

https://www.unh.edu/program/minor/political-science

Description

The study of government and politics, to which the courses and seminars of the Department of Political Science are devoted, includes the development of knowledge of political behavior by individuals and groups as well as knowledge about governments: their nature and functions; their problems and behaviors; and their interactions across all levels of governance.

Much of the learning offered by the Department of Political Science can also be regarded as essential for good citizenship, since political knowledge helps to explain the formal and informal institutions by which we are governed and the forces which lead to policy decisions, and also seeks to clarify the issues and principles that encourage people toward political involvement. In addition, such learning is especially valuable to students planning to enter local or national government or other public service, including the Foreign Service, and it will be of great help to those who intend to study law and enter the legal profession.

Students that would like to transfer credits from abroad or other universities should meet with our political science advisor, Heather Austin, (heather.austin@unh.edu) to determine eligibility toward the minor.

Requirements

Academic policies related to Minors.

- The Political Science minor consists of completing five courses (20 credits).
- These courses may be taken in any combination of the five subfields and levels (400-700) offered. The fields to choose from are: American politics, political thought, comparative politics, international politics and methods.
- A minimum grade of C- or better is required in coursework towards the minor.

Required Courses

Code	Title	Credits
Five elective POLT courses, with no more than two at the 400 level		20
Total Credits		**20**

Survey Research Minor

https://www.unh.edu/program/minor/survey-research

Description

The Survey Research minor will provide students with the skills necessary to design, conduct, analyze and present survey research in a variety of professional settings. This minor will enable students to gain a strong grounding in the theory and practice of survey research, and learn how public opinion forms and changes over time. Students will apply what they have learned at the UNH Survey Center, nationally recognized for its public opinion and political polling. Students who complete this minor will be poised to pursue an advanced degree in this subject and, ultimately, a career in the field.

Requirements

Academic policies related to Minors.

- The Survey Research minor requires five courses (20 credits).

Code	Title	Credits
Core Course		
POLT 512	Public Opinion in American Politics	4
Introduction to Research Methods Course		
Select one course from the following:		4
POLT 595	Smart Politics	
SOC 601	Methods of Social Research	
JUST 501	Research Methods	
Statistics Course		
Select one course from the following:		4
SOC 402	Statistics	
PSYC 402	Statistics in Psychology	
Advanced Research Course Elective		
Select one course from the following:		4
HMP 711	Introduction to Healthcare Operations Analytics	
HMP 712	Healthcare Operations Management	
MKTG 752	Marketing Research	
PSYC 531	Psychobiology	
PSYC 552	Social Psychology	
SOC 620	Drugs and Society	
SOC 625	Mental Health and Society	
SOC 725	Social Demography	
OR other elective based on student's field of interest and approved by the coordinator		
Capstone Practicum		
To be chosen in consultation with the coordinator		4
Total Credits		**20**

Psychology (PSYC)

The Department of Psychology focuses on the scientific study of human and non-human behavior. Our bachelor of arts program in psychology is broad, with an emphasis on technical skills and the opportunity to specialize in areas that interest you. Courses cover such topics as clinical and counseling, social psychology, personality, psychological development, cognition in humans and non-humans, neuroscience, sensory psychology and the history of psychology. Opportunities abound to gain research experience in a wide range of laboratories and/or to participate in clinically-oriented internships.

The program in neuroscience and behavior, shared between Liberal Arts and Life Sciences and Agriculture, focuses on the scientific study of the brain and its relationship to behavior. This bachelor of science program is structured around a rigorous core sequence of courses that incorporates an extensive laboratory experience, with the opportunity for specialization. Courses include such topics as endocrinology, genetics, neurology, animal behavior, neuroscience and philosophy, drugs, sensory systems, mood disorders and ecology. A large number of laboratories are available that routinely incorporate undergraduate students.

Advising System

All students in the department will be assigned a professional advisor, either the Academic Department Coordinator or the Academic Advisor. Academic advisors assist students in all phases of educational planning and decision making, including registration, long-range academic planning, degree and program requirements, and career

selection and planning. Faculty advisors are available to consult with students about research and graduate school options.

https://cola.unh.edu/psychology

Programs

- Psychology Major (B.A.) (p. 341)
- Psychology Minor (p. 343)
- Neuroscience and Behavior Major (B.S.) (p. 438)

Faculty

Psychology Department Faculty

Psychology Major (B.A.)

https://www.unh.edu/program/bachelor-arts/psychology

Description

The Psychology Major provides students with a broad education, while also allowing some specialization. The program exposes students to the scientific study of behavior and encourages an increased understanding of the behavior of humans and animals.

To declare a major in psychology, students must have completed PSYC 401 Introduction to Psychology and PSYC 402 Statistics in Psychology with a grade of C or better and have an overall GPA of 2.0.

Additional Information

Undergraduate Awards for Majors

Each year the faculty chooses psychology undergraduates as the recipients of the following awards: the Herbert A. Carroll Award for an outstanding senior in psychology, the George M. Haslerud Award for an outstanding junior in psychology, the Fuller Foundation Scholarship for an outstanding junior in psychology with demonstrated interests in clinical psychology, the Peter S. Fernald Scholarship for an undergraduate psychology major and the Ellen S. Cohn award for an outstanding senior.

Psychology majors with at least a 3.2 grade-point average are eligible for these awards. Faculty nominate students from the eligibility list and final selection of recipients is made by vote of the full-time psychology faculty.

Honors Program in Psychology

The Department of Psychology sponsors an honors program for outstanding students in the major. Students may apply to the honors program in psychology in their sophomore or junior year. Students interested in applying to the honors program should contact the department coordinator by the end of their sophomore year.

Eligibility criteria include:

1. Overall grade-point average of 3.5 or above and 3.5 in major courses
2. Completion of PSYC 401 Introduction to Psychology, PSYC 402 Statistics in Psychology and PSYC 502 Research Methods in Psychology with a grade of B or above in each.

Requirements of the program include:

1. Designate three of the four 700-level psychology courses as honors or equivalent
2. PSYC 797 Senior Honors Tutorial (fall of senior year)
3. PSYC 799 Senior Honors Thesis (spring of senior year)

Undergraduate Research Conference

The Department of Psychology sponsors the annual George M. Haslerud Undergraduate Research Conference each spring. Undergraduate students in the program present their honors theses at the conference. Contact the department coordinator for more information.

Five-Year BA/MA Program

The five-year B.A./M.A. program in experimental psychology aims to:

1. improve opportunities for excellent undergraduates to prepare for competitive Ph.D. programs or add an additional credential before entering a competitive job market; and
2. allow students interested in experimental psychology to advance and further specialize their psychology education in only one additional year at UNH.

The M.A./B.A. requires a minimum of 30 credits. Eight credits will count towards both the B.A. and M.A. degree. These three courses count as electives and do not go towards the undergraduate psychology major. Students must fulfill all programmatic requirements for the master's degree program, as well as fulfill all programmatic requirements for their bachelor's degree.

The first step toward applying to the program is to contact a faculty member whose research is in a topic that matches your interest in order to arrange support for your thesis or paper of publishable quality. Interested students must submit a full graduate application to the graduate school during their junior year.

For additional information, please contact the department at 603-862-2360 or at psychology.dept@unh.edu.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students majoring in psychology must complete 44 credits with a minimum grade of C- in each course and a 2.0 overall average in all major requirements.

Code	Title	Credits
Required Courses		
PSYC 400	Psychology Freshmen Advising Seminar	1
Core Courses		

PSYC 401	Introduction to Psychology	4
PSYC 402	Statistics in Psychology	4
PSYC 502	Research Methods in Psychology	4
Breadth (500-level) courses		
Group I - Select two courses from the following:		8
PSYC 511	Sensation and Perception	
PSYC 512	Psychology of Primates	
PSYC 513	Cognitive Psychology	
PSYC 521	Behavior Analysis	
PSYC 522	Behaviorism (offered in Manchester only)	
PSYC 531	Psychobiology	
Group II - Select two courses from the following:		8
PSYC 552	Social Psychology	
PSYC 553	Personality	
PSYC 561	Psychopathology	
PSYC 571	Pioneers of Psychology (offered in Manchester only)	
PSYC 581	Child Development	
Depth (700-level) courses		
Group I - Select two courses from the following:		8
PSYC 705	Tests and Measurement	
PSYC 710	Visual Perception	
PSYC 712W	Psychology of Language	
PSYC 713W	Psychology of Consciousness	
PSYC 713	Psychology of Consciousness	
PSYC 720	Animal Cognition	
PSYC 722	Behaviorism, Culture, and Contemporary Society	
PSYC 731	Brain and Behavior	
PSYC 733	Drugs and Behavior	
PSYC 735	Neurobiology of Mood Disorders	
PSYC 736	Attention Disorders	
PSYC 741W	Special Topics (examples:Fundamentals of Substance Abuse, Neuroscience of Memory, Fundamentals of Cognitive Science, Neurobiology of Spatial Cognition & Memory, Psychology of Curiosity)	
Group II - Select two courses from the following:		8
PSYC 705	Tests and Measurement	
PSYC 755	Psychology and Law	
PSYC 756	Psychology of Crime and Justice	
PSYC 757	Psychology of Happiness	
PSYC 758	Health Psychology	
PSYC 759W	Emotion and the Embodied Mind	
PSYC 760W	Ecopsychology	
PSYC 761W	Sport and Performance Psychology	
PSYC 762	Counseling	
PSYC 762W	Counseling	
PSYC 782W	Autobiographical Memory	
PSYC 785	Social Development	
PSYC 793	Internship	
PSYC 791W	Special Topics (examples: Culture and Human Development, Socio & Moral Judgement Development)	
Capstone		
Select from the following:		
PSYC 793	Internship	
or PSYC 798	Capstone	
or PSYC 799	Senior Honors Thesis	
Total Credits		**45**

Note: Many courses have one or more prerequisites. Students (with advisor assistance) are expected to select breadth courses that will later enable them to select depth courses appropriate to their interests and career goals.

Capstone

The Discovery Program capstone requirement, taken during the senior year, may be fulfilled by completing one of the following options:

- The honors-in-major program with an honors project; honors seminar, and research presentation (PSYC 799 Senior Honors Thesis);
- A 4-credit capstone designated independent study project (PSYC 795 Independent Study);
- PSYC 793 Internship;
- Capstone-designated 700-level course.

Statistics

The psychology department does not accept other departments' statistics courses toward the psychology major. Students who have taken a statistics course other than PSYC 402 must pass a competency exam in order to declare the major and/or register for PSYC 402.

Discovery Program

- Major department courses may not be used to satisfy Discovery category requirements except for PSYC 402, which may be used to satisfy the QR Discovery requirement and the major requirement.
- PSYC 401 cannot be used to fulfill a Social Science.
- PSYC 571 cannot be used to fulfill a Historical Perspective.
- In the case that Psychology is a second major, major courses can be counted toward the Discovery requirements.

Transfer Students

Transfer students who elect to major in psychology must complete at least 24 credits in the program at UNH to qualify for the degree in psychology. Transfer students must earn a total of 44 approved credits for completion of the psychology major. The distribution of these credits will be determined by the department's academic advisor. Transfer students should note that courses are allotted only the number of credits granted by the original institution (after adjustments for semester-hour equivalents). Thus, students transferring from an institution at which courses carry fewer than four credits each must make up for any credit deficit created by the acceptance of transfer credits into the psychology major. Only courses taken in a psychology department can be transferred into the psychology major. Of the four 700-level courses required for the major, at least three must be taken at UNH.

Additional Information

Specific course selections should be discussed with an advisor. Exceptions to the requirements for the major require compelling circumstances and a petition to the department.

Psychology majors planning to go on to graduate study in psychology are advised to include PSYC 705 Tests and Measurement among their courses.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of Arts candidates must also satisfy the foreign language proficiency requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
PSYC 400	Psychology Freshmen Advising Seminar	1
PSYC 401	Introduction to Psychology	4
Language Course		4
Discovery Course		4
	Credits	**17**
Spring		
PSYC 402	Statistics in Psychology (QR DISC)	4
PSYC 500-level Breadth Course		4
Language Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
PSYC 502	Research Methods in Psychology	4
PSYC 500-level Breadth Course		4
Discovery Course		4
Elective Course		4
	Credits	**16**
Spring		
PSYC 500-level Breadth Course		4
Discovery Course		4
Discovery Course		4
Elective Course		4
	Credits	**16**
Third Year		
Fall		
PSYC 500-level Breadth Course		4
Discovery Course		4
Discovery Course		4
Elective Course		4
	Credits	**16**
Spring		
PSYC 700-level Depth Course		4
Discovery Course		4
Discovery Course		4
Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
PSYC 700-level Depth Course		4
PSYC 700-level Depth Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
PSYC 700-level Depth Course		4
Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate fundamental knowledge and comprehension of the major concepts, theoretical perspectives, historical trends, and empirical findings in psychology.
- Understand basic research methods in psychology including design, data analysis, and interpretation; and utilize this knowledge to conduct their own psychological research, with an appreciation of the ethical issues involved in human and non-human research.
- Engage in scientific reasoning and problem solving so that they can evaluate the quality and implications of scientific research.
- Write empirical research reports and literature reviews in American Psychological Association style and present findings from scientific research.

Psychology Minor

https://www.unh.edu/program/minor/psychology

Description

Psychology is the study of the mind and human and animal behavior – what motivates us to do the things that we do. In this program, you'll have the opportunity to learn scientific research and analysis methods while studying how we learn and develop, how we interact socially, how our minds affect the way we perceive things and how we identify and define abnormal behavior.

Requirements

Academic policies related to Minors.

- No more than 4 credits of PSYC 795 Independent Study may be applied to the minor.
- A maximum of 9 approved psychology transfer credits can be applied to the UNH psychology minor.
- Transfer courses must be evaluated for their equivalency. Only courses taken in a psychology department can be applied towards the minor.
- Three credit transfer courses can be applied as only three credits. Students must make up the credit deficit created by acceptance of transfer courses, with one exception: one three-credit course accepted in transfer may be applied for a total of 19 credits.
- AP Psychology transferred into UNH is equivalent to PSYC 401.
- Minimum grade of C- in each course.

Required Courses

Code	Title	Credits
PSYC 401	Introduction to Psychology	4
Two courses at the 500 level or higher		8
Two additional PSYC courses		8
Total Credits		**20**

Queer Studies

Programs

- Queer Studies Minor (p. 344)

Queer Studies Minor

https://www.unh.edu/program/minor/queer-studies

Description

The queer studies minor provides students with opportunities to research and understand a rapidly growing field whose focus is the study of lesbian, gay, bisexual, trans and allied peoples, their histories and cultures. Queer studies is a method of inquiry that explores the role of same-sex desire and constructions of gender across and among cultures and histories. In these classes, students will consider sexualities and genders as identities and social statuses, as categories of knowledge, and as lenses that help to frame how we understand our world. The minor consists of interdisciplinary coursework in queer studies. Students who wish to pursue the queer studies minor should consult with Professor Holly Cashman (holly.cashman@unh.edu).

Requirements

Academic policies related to Minors.

- The queer studies minor requires five courses (20 credits). One pre-approved elective from the electives list below may count toward the minor.
- A minimum grade of C- or better is required in coursework toward the minor.
- Additional courses may count toward the minor with approval.

Code	Title	Credits
Requirements		
Select five courses from the following:		
ANTH 625	Sexuality in Cross-Cultural Perspective	4
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa	4
CMN 697	Seminar in Rhetorical Study	4
ENGL 693	Special Topics in Literature	4
HDFS 746	Human Sexuality	4
HDFS 757/857	Race, Class, Gender, and Families	4
HIST 497	Explorations in Historical Perspectives	4
HIST 595	Explorations (Only topics Gender and Sexuality in Pre-Modern Europe; Sex and Sexuality in Islamic History)	1-4
HIST 665	Themes in Women's History	4
HUMA 401	Introduction to the Humanities	4
PSYC 595	Applications of Psychology (Research, Field, or Academic Experience)	1-4
SOC 520	Family	4
SOC 570	Sexual Behavior	4
SW 715/815	Affirming Practice with Lesbian, Gay, Bisexual, Transgender, Queer+ People	4
WGS 405	Gender, Power and Privilege	4
WGS 505	Survey in Women's Studies (Only topics Violence Against Women; Gender, Race and Sexuality in Visual Culture)	4
WGS 632W	Feminist Thought (depending on instructor)	4
WGS 795	Independent Study (or other departmental designation)	1-4
WGS 798W	Colloquium (Only topics Race, Gender, and Representation; Gay Marriage and Kinship; Women in Prison)	4
Electives		
Require program approval and may vary by instructor.		
CMN 567	Gender, Race, and Class in the Media	4
CMN 697	Seminar in Rhetorical Study	4
ENGL 618	Film Theory	4
HDFS 545	Intimate Relationships and Families	4
HUMA 401	Introduction to the Humanities	4
SOC 570	Sexual Behavior	4
SOC 697	Special Topics (Only topic Women, Health, and Illness)	4
SW 840	Implications of Race, Culture, and Oppression for Social Work Practice	3
WGS 401W	Introduction to Women's Studies	4
WGS 444A	Race Matters	4
WGS 632W	Feminist Thought	4
WGS 796	Advanced Topics	4
WGS 797	Internship	4
WGS 798W	Colloquium	4

Race and Ethnic Studies (RES)

Programs

- Race and Ethnic Studies Minor (p. 344)

Race and Ethnic Studies Minor

https://www.unh.edu/program/minor/race-ethnic-studies

Description

The race and ethnic studies (RES) minor examines how racial and ethnic categories are created and maintained — politically, socially and culturally. RES uses critical, interdisciplinary and comparative approaches to study race relations as they intersect with factors including gender and sexuality, class, religion and immigration status. The minor prepares students for life and work in a world increasingly characterized by difference derived from racial and ethnic identities.

Learning Outcomes

Facilitate understanding of how the social constructions of race affect the social fabric of our historical and contemporary world; enhance students' abilities to appreciate differences and to actively and critically engage in civic responsibilities, especially with respect to social justice; prepare students to negotiate an increasingly interconnected world and apply their education in a wide range of occupations; gain exposure to the theories and methods of ethnic studies; and compare representations of borderlands, hybridity, migration and diaspora from different cultures to comprehend how national boundaries, as well as local, national, and transnational cultures and politics, affect the constitution of racial and ethnic categories.

Requirements

Academic policies related to Minors.

The race and ethnic studies minor consists of five courses (20 credits). To complete a minor, students are required to:

1. Enroll in an introductory-level course. (These are listed on the minor website each semester.)
2. Enroll in at least one course at the 600/700-level.

3. Earn a C- or better in each course and maintain a 2.0 grade-point average in courses taken for the minor.
4. Understand that no more than 8 credits used to satisfy the requirements for a major may be used for a minor.
5. Courses taken pass/fail may not be used toward a minor.

A relevant internship may be substituted for one of the electives.

Code	Title	Credits
Approved Courses		
ANTH 500	Peoples and Cultures of the World (when focus is Latin America, SubSaharan Africa or Middle East/North Africa)	4
ANTH 610	Medical Anthropology: Illness and Healing	4
ANTH 625	Sexuality in Cross-Cultural Perspective	4
ANTH 697/ENGL 693	Special Topics (American Roots Music)	4
ANTH 750		4
CMN 567	Gender, Race, and Class in the Media	4
ENGL 550	Introduction to the Literature and Culture of Race	4
ENGL 581	Reading the Postcolonial Experience	4
ENGL 585	Introduction to Women in Literature	4
ENGL 595	Literary Topics (Intro/Caribbean Lit in English ONLINE)	4
ENGL 606	Languages of the World	4
ENGL 714	Critical Skills (topic: On Race)	4
ENGL 778/WGS 798W	Race and Gender in Film and Popular Culture	4
HIST 505	African American History	4
HIST 532	Modern Latin America	4
HIST 588	History of Modern Africa: 1870 to the Present	4
HIST 632	Latin American History: Topics	4
POLT 546	Wealth and Politics in Asia	4
PSYC 571	Pioneers of Psychology	4
SPAN 526	Introduction to Latin American Cultures	4
SPAN 798	Topics in Hispanic Linguistics and Cultural Studies (Language & Id in Spanish)	4
SW 697	Special Topics in Social Welfare (Exploring Social Justice)	4
WGS 401W	Introduction to Women's Studies	4
WGS 405	Gender, Power and Privilege	4
WGS 444A	Race Matters	4
WGS 505	Survey in Women's Studies (Only topics: Leadership for Social Change, Queer Cinema, Queer Sustainability, Gobal Sex Industry, Race, Gender and Enviromental Jutsice, Feminist Perspectives on Media)	4
WGS 632W	Feminist Thought	4
WGS 798W	Colloquium	4

Religious Studies

- Religious Studies Minor (p. 345)

Religious Studies Minor

https://www.unh.edu/program/minor/religious-studies

Description

The religious studies program at the University of New Hampshire currently offers an interdisciplinary minor, bringing together courses in several fields that address religion as a cross-cultural and experiential phenomenon. Topics include beliefs, rituals, texts and the meaning of life as explored in a variety of religious traditions. A religious studies major is available through the self-designed major program. For more information, consult the coordinator.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
HIST 483	History of World Religions	4
HUMA/RS 505	Introduction to Religion	4
Electives		
Select three additional courses from an approved semester list.		12
Total Credits		**20**

Code	Title	Credits
Examples of Approved Electives		
ANTH 640	Anthropology of Islam: Muslims' Everyday Lives in Contemporary Communities	4
ENGL 518W	Bible as Literature	4
HIST 585	Medieval Islam	4
HUMA 526	Humanities and Science (topic: Cognitive Science of Religion)	4
PHIL 417	God, Religion, and the Meaning of Life	4

Additional Information

Students especially interested in religious studies are encouraged to combine the minor with further pertinent coursework in one of the established departments contributing to the program: classics, humanities and Italian studies; history; philosophy; anthropology and English. The religious studies self-designed major includes the minor requirements of HUMA 505/RS 505 Introduction to Religion and HIST 483 as well as eight other relevant courses, which can include independent studies. The program coordinator can aid in advising such a major program.

Courses ordinarily have some degree of focus on issues related to the academic study of religion, conceptualizing religion, or religious influences as a principal concern, asking comparative questions, and/or developing models of cross-cultural usefulness.

Interested students also should be alert for special topics courses in history (e.g. HIST 600 Explorations), English, anthropology (e.g. ANTH 500 Peoples and Cultures of the World), humanities, classics and other disciplines that might be relevant to the study of religion.

Russian (RUSS)

The Russian program provides students with an opportunity to study one of the world's most important languages, its literature and its culture. In addition to the intrinsic value of Russian language, literature and culture as a liberal arts experience, the Russian major leads to a number of careers, such as teaching, translation and interpreting, government and the Foreign Service. It is also a valuable asset in preparing for careers in law, economics and international trade, and it can serve as a double major with business administration, international affairs, homeland security, the natural and physical sciences, and other liberal arts fields such as English, history, political science, sociology, philosophy, theatre, communication, linguistics and other foreign languages.

https://cola.unh.edu/languages-literatures-cultures

Programs

- Russian Major (B.A.) (p. 346)
- Russian Minor (p. 347)

Faculty

Languages, Literatures and Cultures Department Faculty

Russian Major (B.A.)

https://www.unh.edu/program/bachelor-arts/russian

Description

The Russian program provides students with an opportunity to study one of the world's most important languages, its literature and its culture. In addition to the intrinsic value of Russian language, literature and culture as a liberal arts experience, majoring in Russian leads to a number of careers, such as teaching, translation and interpreting, government and the Foreign Service. The knowledge of the language and cultural proficiency is also a valuable asset in preparing you for careers in law, economics and international trade. All Russian majors are strongly encouraged to double major or include a relevant minor in their studies.

If you would like more information please contact LLC.Dept@unh.edu.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

New students will be assigned to the proper language level course after consultation with the Russian faculty.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Russian majors may use two major-required courses to satisfy two Discovery category requirements. In addition, Russian majors may take RUSS 521W Devils, Deities, and Madness in Russian Literature to satisfy both a Discovery Inquiry requirement and a major requirement.

Transfer students must earn a minimum of 12 major credits at the Durham campus.

All students must complete at least 10 classes (40 credits). The required minimum overall GPA in major coursework is 2.0. Specific course requirements are:

Code	Title	Credits
Language Courses [1]		
Students entering major at a higher language level will replace the language courses with additional electives		
RUSS 401	Elementary Russian I	
RUSS 402	Elementary Russian II	
RUSS 503	Intermediate Russian I	
RUSS 504	Intermediate Russian II	
RUSS 631	Advanced Russian Conversation and Composition	
RUSS 632	Advanced Russian Conversation and Composition	
Electives [2]		
Select a minimum of three courses from the following Culture, Linguistics, and Literature category:		
RUSS 521W	Devils, Deities, and Madness in Russian Literature	
RUSS 525	Russia: Mythology and Propaganda	
RUSS 691W	Readings in Russian Literature	
RUSS 733	History of Slavic Languages and Culture	
RUSS 797	Special Studies in Russian Language, Literature, and Culture	
LLC 540	Film History	
LLC 552	Comparative Literature: Masterpieces of World Literature II	
LLC 595	Language Practicum	
LLC 791	Methods of Foreign Language Teaching	
Capstone [3]		
LLC 790	World Languages Capstone	4
Study Abroad		

Study abroad is a requirement for the Russian major, although an approved equivalent high-impact experience may be substituted for study abroad with a compelling justification.

1 While the major may start counting as early as the Elementary I level (RUSS 401), those who enter the major at a higher level (RUSS 503, RUSS 504, RUSS 631, or RUSS 632) will replace the courses they skip from the elementary, intermediate and advanced language category with additional courses from the electives category.

2 More electives required if fewer language credits were completed due to proficiency level and placement.
Students are encouraged to take as many of the culture, linguistics, and literature elective in the Russian language as possible, but there is no limit on the number of classes conducted in English from the electives category. Students taking no classes in the target language in a given semester will be strongly encouraged to enroll in one credit of conversation hour to maintain their language skills, and many of the courses taught in English will allow students the option to (or even require students to) do some work in the target language.

3 Or approved equivalent 700-level course taken at UNH, approved study abroad equivalent, or approved high-impact experience (such as internship with a robust target language/culture component).

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
Language Major Course		4
Discovery Course		4
Discovery Course		4
First Year Seminar		1
	Credits	**17**
Spring		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**

Second Year	
Fall	
Language Major Course	4
Discovery Course	4
Major/Minor/Discovery Course	4
Major/Minor/Discovery Course	4
Credits	**16**
Spring	
Language Major Course	4
Discovery Course	4
Major/Minor/Discovery Course	4
Major/Minor/Discovery Course	4
Credits	**16**
Third Year	
Fall	
Language Major Course	4
Discovery Course	4
Major/Minor/Discovery Course	4
Major/Minor/Discovery Course	4
Credits	**16**
Spring	
Study Abroad (summer and year-long abroad is also available)	16
Credits	**16**
Fourth Year	
Fall	
Language Major Capstone Course	4
Major/Minor/Discovery Course	4
Major/Minor/Discovery Course	4
Major/Minor/Discovery Course	4
Credits	**16**
Spring	
Language Major Course	4
Major/Minor/Discovery Course	4
Major/Minor/Discovery Course	4
Major/Minor/Discovery Course	4
Credits	**16**
Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

- Upon completion of a Russian major, students are able to express themselves orally and in writing on a variety of topics with accuracy, and they are able to support their opinions with evidence found in the media and scholarly reading. Students are able to articulate their ideas and defend their opinions.
- Throughout the language sequence students are expected to give oral presentations on a variety of topics, related to their interest, second major or minor.
- Students have spent at least 8 weeks-semester/year in Russia on a study abroad program, which strengthens their language skills, improves their proficiency, both in language and culturally, and which allows them to interact with native speakers. The major includes at least two courses on Russian literature (one in English and one in Russian), and students are familiar with the works of major Russian authors (i.e. Pushkin, Lermontov, Turgenev, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, Zoshchenko, Bulgakov, among others.) Students are able to understand the texts in the historical and literary movements of Russia, as well as analyze the works in and of themselves. Students study the cultural history of Russia/Soviet Union/Russia to understand the Russian perspective of itself and the world.

Russian Minor

https://www.unh.edu/program/minor/russian

Description

The Russian program provides students the opportunity to minor in Russian. Students develop language proficiency, a solid knowledge of grammar and pronunciation, and knowledge of Russian culture. Students with a Russian minor will have a sufficient command of the language to enhance their chosen field of study, and will have countless career opportunities, such as the public, private and nonprofit sectors, including government, education, journalism, law, communications, and business.

Students in the Russian minor program at UNH are strongly encouraged to study abroad. Foreign language skills and cultural competencies will open doors for students that would not have been opened without the minor in Russian.

Requirements

Academic policies related to Minors.

The minor in Russian consists of completing five courses (20 credits).

Code	Title	Credits
Required Courses		
RUSS 503 & RUSS 504	Intermediate Russian I and Intermediate Russian II	8
Select at least one of the following:		4
RUSS 631	Advanced Russian Conversation and Composition	
RUSS 632	Advanced Russian Conversation and Composition	
RUSS 691W	Readings in Russian Literature	
Select two elective RUSS courses above RUSS 402		8
Total Credits		**20**

Students wishing to minor are expected to meet with a faculty member from the Russian program to discuss their course of study.

Sociology (SOC)

Sociology is the study of social life, social change, and the social causes and consequences of human behavior. Sociologists investigate the structure of groups, organizations and societies, and how people interact within these contexts.

Since human behavior is shaped by social factors, the subject matter of sociology ranges from the intimate family to the hostile mob; from organized crime to religious cults; from the divisions of race, gender and social class to the shared beliefs of a common culture.

https://cola.unh.edu/sociology

Programs

- Sociology Major (B.A.) (p. 348)
- Sociology Minor (p. 350)
- Medical Sociology Cognate (p. 239)

Faculty

Sociology Department Faculty

Sociology Major (B.A.)

https://www.unh.edu/program/bachelor-arts/sociology

Description

Majoring in sociology provides a solid, multifaceted foundation in the liberal arts, including analytical thinking and writing, and skills in collecting and analyzing data. Students learn diverse theoretical approaches to the social world and acquire tools for conducting and understanding social science research. The wide range of substantive areas taught in the UNH Department of Sociology include courses concentrating on family and work; environmental sociology; social policy; inequalities of race, class and gender; criminology, social control and deviant behavior; medical sociology and mental health; and religion.

Undergraduate training in sociology is an excellent background for a variety of careers, including the business world, where majors might work in marketing and sales or human resources; government and nonprofit services, where majors might work in education, health services, social welfare or criminal justice; and research. An undergraduate degree in sociology is also excellent preparation for graduate work in law, social work, criminal justice, counseling, public administration, public health, business administration, urban planning or further studies in sociology.

Conjoint minors (allowing double-counting of one or two courses) are available for justice studies; gerontology; American studies; race and ethnic studies; women's and gender studies; and other approved minors. Students also have the opportunity to pursue a second major, including justice studies. Students interested in social work or teaching can develop programs in conjunction with the appropriate departments. The departmental honors program is recommended for students with cumulative grade-point averages over 3.4, and especially for those anticipating graduate study.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.

**Major GPA requirements as indicated.*

Major Requirements

- Majors must complete a minimum of 40 credits in sociology courses.
- Major courses must be completed with a minimum grade of C- or better in each course. The required minimum overall GPA is 2.0 or better in all sociology courses.
- Sociology majors may use two major-required courses to satisfy two Discovery category requirements.

Code	Title	Credits
Required Core Courses		
SOC 400	Introductory Sociology	4
SOC 402	Statistics	4
SOC 598	Sociological Theory	4
SOC 599	Sociological Analysis [1]	4
SOC 601	Methods of Social Research [2]	4
Electives		
Select five sociology elective courses, at least two of which must be at the 600 or 700 level (upper-level electives).		20
SOC 450	Contemporary Social Problems	
SOC 444A	Honors/Society in the Arctic	
SOC 515	Introductory Criminology	
SOC 520	Family	
SOC 525	Juvenile Crime and Delinquency	
SOC 530	Sociology of Race and Ethnicity	
SOC 535	Homicide	
SOC 555	Death and Dying in America	
SOC 565	Environment and Society	
SOC 570	Sexual Behavior	
SOC 595	Independent Reading and Research	
SOC 620	Drugs and Society	
SOC 625	Mental Health and Society	
SOC 627	Sociology of Fashion	
SOC 636	Sociology of Justice	
SOC 645	Class, Status and Power	
SOC 647	Sociology of Work and Well-Being	
SOC 665	Environmental Sociology	
SOC 693	Global Change and Social Sustainability	
SOC 720	Sociology of Drug Use	
SOC 697	Special Topics	
SOC 725	Social Demography	
SOC 635W	Medical Sociology	
SOC 799H	Senior Honors Thesis	
SOC 730	Communities and the Environment	
SOC 740	Sociology of Mental Health	
SOC 788		
SOC 792	Internship Independent Study	
SOC 799	Senior Thesis	
Capstone Requirement		
Select from the following:		
Complete any 600/700-level Sociology course or		
IROP/SURF research experience or		
SOC 799	Senior Thesis	
Total Credits		**40**

1 SOC 599 Sociological Analysis must be completed no later than the junior year and is a prerequisite for majors taking 600- and 700-level courses.

2 SOC 402 Statistics is a prerequisite for SOC 601 Methods of Social Research.

Additional Information

SOC 595 Independent Reading and Research can be used to fulfill one lower-level elective or SOC 799 Senior Thesis can be used to fulfill one upper-level elective.

SOC 599 Sociological Analysis can be used to satisfy both a major requirement and the Inquiry Discovery requirement.

Statistics courses taken in other disciplines are not acceptable as a substitute for SOC 402 Statistics.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. B.A. candidates must also satisfy the foreign language proficiency requirement.

Students interested in majoring in sociology should consult with the director of undergraduate program in the sociology department for guidance. It is the responsibility of all sociology majors to obtain the latest information from the department office.

Sociology Language Requirement

The bachelor of arts degree at the University of New Hampshire requires that students satisfy the foreign language proficiency requirement. The requirement may be met by demonstrating language proficiency equal to a one-year college-level course (401 and 402, 403 and 503, 501 [Latin only], or 503 and above in a spoken language). American Sign Language courses meet the foreign language proficiency requirement for sociology majors when ASL I and ASL II have been completed.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
SOC 400	Introductory Sociology	4
COLA 401	Liberal Arts Advising Seminar	1
Elementary Language Course		4
Discovery Course		4
ENGL 401	First-Year Writing	4
	Credits	**17**
Spring		
SOC 402	Statistics	4
Intermediate Language Course		4
Discovery Course		4
Sociology 400/500-Level Elective		4
	Credits	**16**
Second Year		
Fall		
SOC 599	Sociological Analysis	4
Sociology 400/500-Level Elective		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
SOC 598	Sociological Theory	4
Discovery Course		4
Discovery Course		4
Sociology 400/500-Level Elective		4
	Credits	**16**
Third Year		
Fall		
SOC 601	Methods of Social Research	4
Discovery Course		4
Discovery Course		4
Elective Course		4
	Credits	**16**
Spring		
Sociology Elective (Any Level)		4
Discovery or Elective Courses		12
	Credits	**16**
Fourth Year		
Fall		
Sociology 600/700-Level Elective		4
Discovery or Elective Courses		12
	Credits	**16**
Spring		
Sociology 600/700-Level Elective		4
Discovery or Elective Courses		12
	Credits	**16**
	Total Credits	**129**

Note: Sociology majors are required to take at least one Sociology class each semester until they have fulfilled their major requirements.

Student Learning Outcomes

Program Learning Outcomes

- Outcome 1: Students will learn to articulate and evaluate how individual biographies are shaped by social structures, social institutions, cultural norms, and multiple of dimensions of social stratification and inequality. (Sociological imagination)
- Outcome 2: Students will learn to analyze and evaluate multiple and competing arguments about high-profile social, political, and cultural current events; distinguish between evidence and opinions; and use reason and data to advance an argument. (Critical thinking)
- Outcome 3: Students will learn to use, evaluate, and apply classical and contemporary theoretical perspectives to historical and contemporary events. (Sociological theory)
- Outcome 4: Students will learn how to generate and interpret qualitative and quantitative data in a value-neutral way. (Data analysis)
- Outcome 5: Students will learn how to interpret and evaluate several of the major social science research methodologies, as well as the relationship between research questions and appropriate methods. (Research methods)

- Outcome 6: Students will learn to effectively communicate a sociological perspective both in writing and verbally. (Communication skills)
- Outcome 7: Students will learn to understand how people of different cultural, racial, ethnic, sex, gender, religious, and political identities interpret the world around them. (Living in a complex society)
- Outcome 8: Students will learn to work effectively and respectfully with people of different backgrounds, experiences, and perspectives. (Collaboration)

Sociology Minor

https://www.unh.edu/program/minor/sociology

Description

Minoring in sociology provides a foundation in analytical thinking and writing, and skills in collecting and analyzing data. Students learn diverse theoretical approaches to the social world and acquire tools for conducting and understanding social science research. Course topics include family and work; environmental sociology; social policy; inequalities of race, class and gender; criminology, social control and deviant behavior; medical sociology and mental health; and religion.

Undergraduate training in sociology is an excellent background for a variety of careers, including the business world, working in marketing and sales or human resources; government and nonprofit services, working in education, health services, social welfare or criminal justice; and research. A minor in sociology is also excellent preparation for graduate work in law, social work, criminal justice, counseling, public administration, public health, business administration, urban planning and other fields.

Requirements

Academic policies related to Minors.

A minor consists of completing five courses in sociology (20 credits) with a minimum grade of C- or better in each course and a grade-point average of 2.0 or better in these courses.

Code	Title	Credits
Requirements		
Select five courses from the following:		20
SOC 400	Introductory Sociology	4
SOC 402	Statistics	4
SOC 444A	Honors/Society in the Arctic	4
SOC 450	Contemporary Social Problems	4
SOC 515	Introductory Criminology	4
SOC 520	Family	4
SOC 525	Juvenile Crime and Delinquency	4
SOC 530	Sociology of Race and Ethnicity	4
SOC 535	Homicide	4
SOC 555	Death and Dying in America	4
SOC 565	Environment and Society	4
SOC 570	Sexual Behavior	4
SOC 595	Independent Reading and Research	2-8
SOC 598	Sociological Theory	4
SOC 599	Sociological Analysis	4
SOC 601	Methods of Social Research	4
SOC 620	Drugs and Society	4
SOC 625	Mental Health and Society	4
SOC 627	Sociology of Fashion	4
SOC 635W	Medical Sociology	4
SOC 636	Sociology of Justice	4
SOC 645	Class, Status and Power	4
SOC 647	Sociology of Work and Well-Being	4
SOC 665	Environmental Sociology	4
SOC 693	Global Change and Social Sustainability	4
SOC 697	Special Topics	4
SOC 720	Sociology of Drug Use	4
SOC 725	Social Demography	4
SOC 730	Communities and the Environment	4
SOC 740	Sociology of Mental Health	4
SOC 788		4
SOC 792	Internship Independent Study	2-8
SOC 799	Senior Thesis	4 or 8
SOC 799H	Senior Honors Thesis	4 or 8

Medical Sociology Cognate

https://www.unh.edu/program/cognate/medical-sociology

Description

The medical sociology cognate provides students with an understanding of how social structure shapes the etiology of health and illness as well as the availability, effectiveness and choices around health care on micro and macro levels. It develops students' sociological imagination, fosters their application of a sociological perspective to the study of health, and allows them to gain the skills needed to be informed consumers of empirical health research. The focus on empirical literacy that is central to courses in sociology facilitates students' ability to communicate and apply research findings in their respective professional fields.

Although the sociological perspective will benefit students from all backgrounds, a cognate in medical sociology may be especially relevant for students majoring in biomedical science, neuroscience and behavior, psychology, gerontology, health and physical education, nursing, health policy and administration, business, human development and others.

Requirements

• Any three courses in medical/health focused sociology courses (12 credits) with a grade of C- or better
• Submission of a completed "Certification of Completion of Cognate" form
• Courses taken pass/fail may NOT be used for the cognate.
• Sociology majors may count cognate classes as major electives.

Code	Title	Credits
Required Courses		
Select three courses from the following:		12
SOC 555	Death and Dying in America	
SOC 570	Sexual Behavior	
SOC 620	Drugs and Society	
SOC 625	Mental Health and Society	
SOC 635W	Medical Sociology	
SOC 647	Sociology of Work and Well-Being	
SOC 697	Special Topics (Topic: Work and Well-Being)	
SOC 740	Sociology of Mental Health	
SOC 788		
Total Credits		**12**

Spanish (SPAN)

The Spanish program major and minor in the Department of Languages, Literatures and Cultures helps students develop Spanish language proficiency and enhanced knowledge of the cultural and literary achievements of Hispanic societies around the globe. This dual emphasis on communication and cultural analysis prepares students to live in communities where Spanish is increasingly important professionally and personally.

Students also have the option to complete honors in the major providing they complete the necessary classes and a senior thesis in Spanish.

UNH students have the opportunity to study abroad during the academic year or during the summer. Programs are available in Spain and in Latin America, including a six-week summer immersion program in Costa Rica also is available to students. Financial aid is available for eligible students. Visit the COLA Study Abroad website for more information, or contact the departmental program directors.

https://cola.unh.edu/languages-literatures-cultures

Programs

- Spanish Major (B.A.) (p. 351)
- Spanish Minor (p. 353)

Faculty

Languages, Literatures and Cultures Department Faculty

Spanish Major (B.A.)

https://www.unh.edu/program/bachelor-arts/spanish

Description

When you major in Spanish you are opening your opportunities to a variety of fields in which proficiency in the Spanish language and knowledge of Hispanic cultures are desirable or required. Such fields might include international relations, business administration, government, social service and communications. The undergraduate major also provides a basis for graduate study in preparation for scholarly research and teaching at the college level. When combined with coursework or a dual major in other disciplines, the major prepares students for work in Spanish-speaking areas of the world as well as in bilingual regions of the United States.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

All students must complete at least 10 classes (40 credits). All coursework required for the Spanish major must be completed with a grade of C or better.

The required minimum overall GPA for study abroad and the Spanish major coursework is 2.0.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Spanish majors may use two major-required courses to satisfy two Discovery category requirements.

Code	Title	Credits
Requirements		
Language Courses [1]		
Students entering major at a higher language level will replace the language courses with additional electives		
SPAN 503	Intermediate Spanish I	
SPAN 504	Intermediate Spanish II	
SPAN 631	Advanced Conversation and Composition I	
SPAN 632	Advanced Conversation and Composition II	
Electives [2]		
Select a minimum of five courses from the following Culture, Linguistics, and Literature category		
SPAN 525	Introduction to Spanish Cultures	
SPAN 526	Introduction to Latin American Cultures	
SPAN 641	Spanish Language Variation & Change	
SPAN 645	Intro to Spanish Linguistics	
SPAN 647	Topics in Hispanic Cultural Studies	
SPAN 648	The Hispanic World Today	
SPAN 650	Hispanic Literature and Popular Culture	
SPAN 654	Introduction to Latin American Literature and Thought	
SPAN 790	Topics in Second Language Acquisition/Pedagogy/Methodology	
SPAN 797	Topics in Hispanic Literary and Cultural Studies	
SPAN 798	Topics in Hispanic Linguistics and Cultural Studies	
SPAN 799	Senior Honors	
LLC 540	Film History	
LLC 552	Comparative Literature: Masterpieces of World Literature II	
LLC 555	Discover Cuba: An Arts Experience	
LLC 791	Methods of Foreign Language Teaching	
Capstone [3]		
LLC 790	World Languages Capstone	4
Study Abroad		
An approved foreign study experience in a Spanish-speaking country is required, although an approved equivalent high-impact experience may be substituted for study abroad with a compelling justification		

1 While the major may start counting as early as the Intermediate I level (SPAN 503), those who enter the major at a higher level (SPAN 504, SPAN 631, or SPAN 632) will replace the courses they skip from the four in the intermediate and advanced language category with additional electives in the Culture, Linguistics, and Literature category.

2 More electives required if fewer language credits were completed due to proficiency level and placement.
No limit on the number of classes in English allowed. Students taking no classes in the target language in a given semester will be strongly encouraged to enroll in one credit of conversation hour to maintain their language skills, and many of the courses taught in English will allow students the option to (or even require students to) do some work in the target language.

[3] Or approved equivalent 700-level course taken at UNH, approved study abroad equivalent, or approved high-impact experience (such as internship with a robust target language/culture component).

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
Language Major Course		4
Discovery Course		4
Discovery Course		4
First Year Seminar		1
	Credits	**17**
Spring		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Second Year		
Fall		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Language Major Course		4
Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Study Abroad (summer and year-long abroad is also available)		16
	Credits	**16**
Fourth Year		
Fall		
Language Major Capstone Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
Spring		
Language Major Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
Major/Minor/Discovery Course		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

Linguistic Proficiency

- Students can demonstrate an Advanced level of proficiency (as defined in ACTFL Proficiency Guidelines) in the target language in speaking, writing, listening and reading.
- Speaking: students are able to handle a variety of communicative tasks. They are able to participate in most informal and formal conversations on topics related to school, home, academic, and other activities. They can also speak about topics related to employment, current events, and matters of public and community interest.
- Writing: students are able to meet work and/or academic writing needs. They demonstrate the ability to narrate, describe and express viewpoints about topics in major time frames with control of aspect.
- Listening and Reading: students are able to understand conventional narrative and descriptive texts (spoken and/or written). They can understand the main facts, tone and style, and supporting details.
- Comprehension: students may often develop understanding primarily from their particular situational and subject-matter knowledge(course materials, contextual knowledges, and study abroad experiences), but each student should be able to extend and expand their comprehension to most areas of specialized and non-specialized materials, especially as that directly relates to any of the student's other major and minor academic subjects of study.

Intercultural and Transcultural Competence

- Students will demonstrate knowledge and understanding of other cultures, and are able to think critically about and are able to recognize and accept culturally differences, and the uniqueness of other cultures and peoples. By the time they graduate from our program, they will be able to:
- Recognize and describe the historical, social, economic, and political forces that shape society in the various target cultures that they have directly studied (taking into account that they cannot be familiar with all the particular specificities of the 23+ nations of the Spanish-Speaking world).
- Analyze and critique the cultural and social products of the target culture(s)(film, literature, art, popular culture, media, etc.) within their context, including conducting basic research projects.
- On a broader level, each student should be able to begin to question the validity of their own cultural beliefs, behaviors and norms, by contrasting and comparing them with those of the target culture (cross-cultural sensitivity and respect).

- Students should be able to perceive and value cultural diversity and reinterpret the place of the self as an individual culturally situated within the global context of the twenty-first century.

Spanish Minor

https://www.unh.edu/program/minor/spanish

Description

When you minor in Spanish you are expanding upon opportunities and opening doors to careers in your field of interest. Many other disciplines such as social service, nursing, teaching and business require Spanish as a second language since Spanish is the second most spoken language in the United States. Increasingly, employers in government at municipal, state and federal levels and business as well as related careers, are viewing such experience and language skills favorably.

Requirements

Academic policies related to Minors.

Required Courses

Code	Title	Credits
Select five courses in SPAN 503 or above, which must include:		20
SPAN 631	Advanced Conversation and Composition I	
SPAN 632	Advanced Conversation and Composition II	
Total Credits		**20**

Theatre and Dance (THDA)

There is no area of human endeavor that theatre does not touch. To study theatre is to learn a great deal about yourself and about the world in which you will live. No course of study will prepare you better for life in a rapidly changing world.

The award-winning faculty at the University of New Hampshire provide theatre and dance majors with superlative training within a broad liberal arts context. Students may take courses in acting; voice and movement; dialects; directing; choreography; design and theatre technology; the history, theory and criticism of drama and theatre; youth drama; secondary theatre education; playwriting; storytelling; puppetry; ballet; theatre dance (jazz and tap); aerial dance; and musical theatre. Students interested in performance, technical and historical aspects are trained to step into professional careers while still broadening the scope of their preparation through a rich liberal arts education. The program encourages students to explore their interests through independent studies and internships, special projects and active personal involvement in lecture and laboratory classes, with the possibility for integration with other departments. To assist with financial needs, the department awards scholarships to selected majors each spring.

The Department of Theatre and Dance offers various performance opportunities every year. In addition to performing, students are given the opportunity to direct, stage manage, design, choreograph or write scripts for the work done in our department. We offer jazz, tap and ballet studies. In addition, UNH was the first university to add Aerial Dance to course offerings. Students study with faculty who have worked locally, nationally and internationally.

In addition to comprehensive liberal arts preparation, six specific course sequences are available within the theatre major:

1. courses leading to a theatre major with an option in acting & directing;
2. courses leading to a theatre major with an option in dance: ballet, theatre dance (tap and jazz) and aerial dance. Students also have the option of pursuing dance education leading to K-12 dance teacher certification. You may achieve dance licensure in two different ways. You may pursue dance education/licensure through the undergraduate program. This leaves no room for double majors or minors. If you want to broaden your undergraduate education and need more space for classes outside of THDA, you may pursue the five-year program, beginning preparation for teaching at the undergraduate level and then pursuing a graduate degree to get dance certification. Students complete a baccalaureate degree in theatre with a dance option and move into a fifth year of study with a full-year internship, leading to either the Masters in Education (M.Ed.) or a Master of Arts in Teaching (M.A.T.) degree and licensure for teaching;
3. courses leading to a theatre major with an option in design & theatre technology;
4. courses leading to a theatre major with an option in musical theatre;
5. courses leading to a theatre major that, if desired, may be combined with requirements of the Department of Education to pursue a K-12 teacher's license. You may achieve theatre licensure in two different ways. You may pursue secondary theatre education/licensure through the undergraduate program. This leaves no room for double majors or minors. If you want to broaden your undergraduate education and need more space for classes outside of THDA, you may pursue the five-year program, beginning preparation for teaching at the undergraduate level and then pursuing a graduate degree to get theatre arts certification. Students complete a baccalaureate degree in theatre with a secondary theatre education option and move into a fifth year of study with a full-year internship, leading to either the Masters in Education (M.Ed.) or a Master of Arts in Teaching (M.A.T.) degree and licensure for teaching;
6. courses leading to a theatre major that, if desired, may be combined with requirements of the Department of Education, in conjunction with a fifth year master of education (M.Ed.) program, to prepare students for elementary school certification with an undergraduate option in youth drama.

Auditions are required for the acting, dance and musical theatre options. Interviews are strongly encouraged for all other areas. In addition to the audition, students will take part in group acting exercises, do a dance call and have an opportunity to ask questions during a comprehensive department overview. Please note that entrance into Department of Theatre and Dance options is contingent upon acceptance into the University of New Hampshire. Audition dates, as well as detailed entrance requirements, can be found at the Department of Theatre and Dance website.

Minoring in Theatre and Dance

A minor acknowledges a level of competence and academic focus without the depth a major requires. Students may pursue a minor while majoring in another subject when the demands of that major prevent the possibility of a double major.

https://cola.unh.edu/theatre-dance

Programs

- Theatre Major (B.A.) (p. 354)
- Theatre Major: Acting and Directing Option (B.A.) (p. 356)
- Theatre Major: Dance Option (B.A.) (p. 358)
- Theatre Major: Design & Theatre Technology Option (B.A.) (p. 359)
- Theatre Major: Musical Theatre Option (B.A.) (p. 361)
- Theatre Major: Secondary Theatre Education Option (B.A.) (p. 363)
- Arts Administration Minor (p. 366)
- Dance Minor (p. 367)
- Musical Theatre Minor (p. 367)
- Theatre Minor (p. 368)
- Youth Drama Minor (p. 368)
- Studies in Fashion and Design Cognate (p. 241)
- Studies in the Design of Interior Space Cognate (p. 241)

Faculty

Theatre and Dance Department Faculty

Theatre Major (B.A.)

https://www.unh.edu/program/bachelor-arts/theatre

Description

The Theatre Major at UNH offers a comprehensive education in performance, dance, theatre history, design, and theatre technology. With a flexible credit load, students can pair theatre studies with another major. The program features award-winning faculty and various performance opportunities, including student productions. Enrichment opportunities involve pursuing independent study to deepen learning regarding areas of interest; applying for R.E.A.C.H. financial assistance to help subsidize practical internships; experiencing a 10-day January Term study-abroad program in London.

There is no area of human endeavor that the theatre does not touch; to teach and learn about theatre is to teach and learn about human life. Whether you live for the stage, have a love of costumes, or see yourself running things behind the scenes, a theatre degree will allow you to engage with your passion for the performing arts and for the life that the performing arts imitate. You'll study performance, theatre history, and the elements of design and theatre technology. The program was designed with a relatively light credit load, allowing you to combine your theatre studies with another major.

The UNH Department of Theatre and Dance offers a variety of performance opportunities every year in musicals, plays and dance concerts, including student productions. The curriculum allows for flexibility to independently study a broad range of interests. Financial assistance provides access to internship opportunities with professional theatre or dance organizations, and our January Term study abroad program immerses students in London theatre as well as gaining insights into politics and societal issues.

Contact Szu-Feng Chen (szu-feng.chen@unh.edu), Paul Creative Arts Center, (603) 862-4445.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In the freshman and sophomore years, students should enroll for at least two major and two Discovery courses per semester.

The minimum grade requirement for major courses is C- per course. Any grade lower than C- will not count toward the major.

The required minimum overall GPA in major coursework is 2.0.

Under department policy, students who complete both COMM 401 and COMM 502 satisfy the bachelor of arts language proficiency requirement.

All majors must take courses in the following areas: performance, design/theatre technology and theory/history as well as fulfill between four and eight practicums and complete a capstone course. Although timing will vary with each option, it is strongly suggested that all introductory courses be taken prior to the end of the student's sophomore year. Students must also complete a digital portfolio that demonstrates fulfillment of student learning outcomes related to their area of study.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Theatre department majors may use one major-required course to satisfy one Discovery Program category requirement.

Code	Title	Credits
Required Courses		
THDA 436	History of Theatre I	4
or THDA 438	History of Theatre II	
THDA 459	Stagecraft	4
THDA 460	Elements of Design	4
THDA 462	Ballet I	4
or THDA 463	Theatre Dance I	
THDA 551	Acting I	4
THDA 589	Practicum (A - C) [1]	3-8
THDA 798	Senior Thesis	2
or THDA 799	Capstone Project	
Theory/History		
Select from the following courses:		4
THDA 436	History of Theatre I	
or THDA 438	History of Theatre II	
THDA 444B	Famous Dancers of the 20th Century	
THDA 450	History of Musical Theatre in America	
THDA 541	Arts Administration and Entrepreneurship	
THDA 640W	Playwriting	
THDA 721	Arts Integration	

THDA 727	Methods of Teaching Theatre	
Design/Theatre Technology		
Select from the following courses:		4
THDA 458	Costume Construction	
THDA 475	Stage Makeup	
THDA 546	Costume Design for the Theatre	
THDA 548	Stage Lighting Design and Execution	
THDA 583	Introduction to Puppetry	
THDA 641	Stage Management	
THDA 652	Scene Design	
THDA 683	Advanced Puppetry	
Performance		
Select from the following courses:		4
THDA 462	Ballet I	
THDA 463	Theatre Dance I	
THDA 522	Storytelling, Story Theatre, and Involvement Dramatics	
THDA 532	The London Experience	
THDA 552	Acting II	
THDA 555	Acting The Song	
THDA 624	Theatre for Young Audiences	
THDA 655	Musical Theatre Scene Study	
THDA 741	Directing	
THDA 755	Musical Theatre Repertoire	
THDA 758	Acting III	
Electives [2]		
Select 600-700 level courses		8
Total Credits		**45-50**

[1] The practicum ensures a breadth of experience in the major, including sets, costumes, lighting, props, box office, marketing, and performing. Students must register for practicum every semester. They are notified of their practicum assignment at the beginning of each semester.

[2] Includes those in Sections II, III, and IV

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
THDA Course		4
THDA Course		4
THDA 401	New Student Seminar	1
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
	Credits	**18**
Spring		
THDA Course		4
THDA Course		4
THDA Course		4
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
	Credits	**21**
Second Year		
Fall		
THDA Course		4
THDA 589	Practicum	1
Language Course		4
Discovery Course		4
Major Elective/Minor Requirement		4
Major Elective/Minor Requirement		0-4
	Credits	**17-21**
Spring		
THDA Course		4
THDA 589	Practicum	1
Language Course		4
Discovery Course		4
Major Elective/Minor Requirement		4
Major Elective/Minor Requirement		0-4
	Credits	**17-21**
Third Year		
Fall		
THDA Course		4
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
Major Elective/Minor Requirement		4
Major Elective/Minor Requirement		0-4
	Credits	**17-21**
Spring		
THDA Course		4
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
Major Elective/Minor Requirement		4
Major Elective/Minor Requirement		0-4
	Credits	**17-21**
Fourth Year		
Fall		
THDA Course		4
THDA 589	Practicum	1
Major Elective/Minor Requirement		4
Major Elective/Minor Requirement		4
Major Elective/Minor Requirement		4
	Credits	**17**
Spring		
THDA Course		4
THDA 799	Capstone Project	2
THDA 589	Practicum	1
Major Elective/Minor Requirement		4
Major Elective/Minor Requirement		4
	Credits	**15**
	Total Credits	**139-155**

Student Learning Outcomes

Program Learning Outcomes

On completion of the B.A. in Theatre, students will:

- Recognize and distinguish between various styles and forms of theatre or dance that have shaped the evolution of these disciplines.
- Effectively communicate artistic ideas and/or critical analysis of theatre or dance works through appropriate oral, written or practical means.
- Demonstrate knowledge and fundamental skill level of the basic areas of theatre or dance production in areas related to performance, design, technology or management.
- Create and demonstrate informed and personal artistic choices in coursework and productions (i.e., design, dance, directing, acting).

Theatre Major: Acting and Directing Option (B.A.)

https://www.unh.edu/program/bachelor-arts/theatre-acting-directing

Description

The Theatre Major: Acting and Directing Option at UNH is one of the few programs in the nation that offers the opportunity to combine these two disciplines in a single trajectory. Students gain comprehensive skills through courses in acting, voice, movement, directing and more, with this work applied to theatre and media/camera. This is combined with hands-on experience in all areas of production. With a variety of performance opportunities and independent study options, graduates are well-prepared for wide-ranging careers in theatre and beyond. The program offers those who participate in professional internships the ability to apply for departmental financial aid. Students receive additional training with acclaimed guest artists through our Performance Arts Enrichment Initiative (PAEI) and have opportunities to perform professionally with our touring Little Red Wagon family theatre and our applied theatre company, PowerPLAY.

With a focus on creating the self-sufficient theatre artist, this option is designed to develop the skills and artistry necessary for a wide-ranging career in theatre. You'll take multiple levels of acting, voice, movement, and directing courses. Students will delve into virtually every aspect of the theory, history and practice of theatre with additional course work in camera/media performance. With numerous opportunities for hands-on experience in all areas of theatre, students graduating with a theatre degree will have built a formidable base of knowledge and skill for work on stage and beyond.

If you are fully committed and serious about becoming a true theatre artist; if you want to develop the skills and artistry necessary to work professionally; if you are dedicated to growing and applying the five "Cs"--creativity, communication, collaboration, critical analysis and commitment--to everything you do, then studying acting and directing at UNH is the right fit. The NH Seacoast region offers many professional theatres where students can pursue opportunities to build their resumes while at UNH. Featuring an award-winning faculty, our program is demanding yet offers a flexibility in course choices that allows you to further customize a four-year experience that will serve you for your entire career.

Contact David Kaye (david.kaye@unh.edu), Paul Creative Arts Center, (603) 862-0667.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In the freshman and sophomore years, students should enroll for at least two major and two Discovery courses per semester.

The minimum grade requirement for major courses is C- per course. Any grade lower than C- will not count toward the major.

The required minimum overall GPA in major coursework is 2.0.

Under department policy, students who complete both COMM 401 and COMM 502 satisfy the bachelor of arts language proficiency requirement.

All majors must take courses in the following areas: performance, design/theatre technology and theory/history as well as fulfill between four and eight practicums and complete a capstone course. Although timing will vary with each option, it is strongly suggested that all introductory courses be taken prior to the end of the student's sophomore year. Students must also complete a digital portfolio that demonstrates fulfillment of student learning outcomes related to their area of study.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Theatre department majors may use one major-required course to satisfy one Discovery Program category requirement.

Code	Title	Credits
Required Courses		
THDA 436	History of Theatre I	4
THDA 438	History of Theatre II	4
THDA 459	Stagecraft	4
THDA 460	Elements of Design	4
THDA 462	Ballet I	4
or THDA 463	Theatre Dance I	
THDA 551	Acting I	4
THDA 552	Acting II	4
THDA 570	Movement & Vocal Production	4
THDA 589	Practicum (A - C) [1]	4-8
THDA 632	Interpretation of Shakespeare in Theatre	4
or THDA 759	Acting: Period and Style	
THDA 670	Dialects	4
THDA 741	Directing	4
THDA 742	Directing II	4
THDA 758	Acting III	4

THDA 799	Capstone Project	2
Total Credits		**58-62**

[1] The practicum ensures a breadth of experience in the major, including sets, costumes, lighting, props, box office, marketing, and performing. Students must register for practicum every semester. They are notified of their practicum assignment at the beginning of each semester.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
Language Course		4
THDA 551	Acting I	4
Discovery Course		4
First Year Seminar		1
Practicum		1
	Credits	**18**
Spring		
Language Course		4
THDA 570	Movement & Vocal Production	4
Discovery Course		4
Major/Minor/Discovery Course		4
THDA 459	Stagecraft	0
Practicum		1
	Credits	**17**
Second Year		
Fall		
THDA 552	Acting II	4
THDA 436	History of Theatre I	4
Discovery Course		4
Major/Minor/Discovery Course		4
THDA 460	Elements of Design	4
Practicum		1
	Credits	**21**
Spring		
THDA 463 or THDA 462	Theatre Dance I or Ballet I	4
THDA 438	History of Theatre II	4
Discovery Course		4
Major/Minor/Discovery Course		4
Practicum		1
	Credits	**17**
Third Year		
Fall		
THDA 632 or THDA 759	Interpretation of Shakespeare in Theatre or Acting: Period and Style	4
THDA 741	Directing	4
Discovery Course		4
Major/Minor/Discovery Course		4
THDA 450	History of Musical Theatre in America	4
Practicum		1
	Credits	**21**
Spring		
THDA 742	Directing II	4
THDA 758	Acting III	4
Discovery Course		4
Major/Minor/Discovery Course		4
Practicum		1
	Credits	**17**
Fourth Year		
Fall		
THDA 799	Capstone Project	2
Major Elective Course		4
Major Elective Course		4
Elective Course		4
Practicum		1
	Credits	**15**
Spring		
THDA 670	Dialects	4
THDA 554	Stage Combat	4
Elective Course		4
Elective Course		4
Practicum		1
	Credits	**17**
	Total Credits	**143**

Student Learning Outcomes

Program Learning Outcomes

On completion of the B.A. in Theatre, students will:

- Recognize and distinguish between various styles and forms of theatre or dance that have shaped the evolution of these disciplines.
- Effectively communicate artistic ideas and/or critical analysis of theatre or dance works through appropriate oral, written or practical means.
- Demonstrate knowledge and fundamental skill level of the basic areas of theatre or dance production in areas related to performance, design, technology or management.
- Create and demonstrate informed and personal artistic choices in coursework and productions (i.e., design, dance, directing, acting).

On completion of the option in Acting and Directing, students will:

- Achieve at minimum an intermediate proficiency in fundamental skills related to theatrical performance.
- Utilize critical thinking and writing skills to analyze plays for both the performance of roles and the direction of productions in a range of styles and genres.
- Effectively communicate and collaborate with all participants in the interactive and creative process of theatre.

- Form, communicate and defend verbally and in writing value judgments about quality and aesthetics of performance and directing in works of theatre.
- Demonstrate knowledge of basic terminology of acting and directing as well as leading practitioners and theorists of the acting and directing process.

Theatre Major: Dance Option (B.A.)

https://www.unh.edu/program/bachelor-arts/theatre-dance

Description

The Theatre Major: Dance Option at UNH is designed to prepare students for dynamic careers in dance and related fields, including performance, choreography, and education. The program features a comprehensive curriculum encompassing diverse dance styles such as Ballet, Pointe, Jazz, Tap, Musical Theatre, and Aerial Dance. Students benefit from the expertise of distinguished faculty and a wide array of performance opportunities, including the UNH Dance Company Concert, Ballet Showcases, and Dance and Aerial Showcases. Additional opportunities include internships, guest artist workshops, and global exposure through study-abroad programs like The London Experience. Alumni from the program have excelled in prestigious venues such as Boston Ballet, Cirque du Soleil, Broadway, and major networks like ABC, HBO, and Disney, exemplifying the program's excellence in preparing students for competitive careers.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In the freshman and sophomore years, students should enroll for at least two major and two Discovery courses per semester.

The minimum grade requirement for major courses is C- per course. Any grade lower than C- will not count toward the major.

The required minimum overall GPA in major coursework is 2.0.

Under department policy, students who complete both COMM 401 and COMM 502 satisfy the bachelor of arts language proficiency requirement.

All majors must take courses in the following areas: performance, design/theatre technology and theory/history as well as fulfill between four and eight practicums and complete a capstone course. Although timing will vary with each option, it is strongly suggested that all introductory courses be taken prior to the end of the student's sophomore year. Students must also complete a digital portfolio that demonstrates fulfillment of student learning outcomes related to their area of study.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Theatre department majors may use one major-required course to satisfy one Discovery Program category requirement.

Code	Title	Credits
Required Courses		
THDA 459	Stagecraft	4
or THDA 460	Elements of Design	
THDA 487	History of Dance	4
THDA 551	Acting I	4
THDA 589	Practicum (A - C) [1]	1
THDA 795W	Independent Study	2
THDA 799	Capstone Project	2
or THDA 798	Senior Thesis	
Theory Courses		
THDA 633	Dance Composition	4
THDA 732	Choreography	4
THDA 786	Dance Pedagogy	4
Fine Arts		
Select 8 credits from the following:		8
THDA 444B	Famous Dancers of the 20th Century	
THDA 459	Stagecraft	
THDA 460	Elements of Design	
THDA 546	Costume Design for the Theatre	
THDA 548	Stage Lighting Design and Execution	
THDA 555	Acting The Song	
THDA 564	Compocinema	
THDA 655	Musical Theatre Scene Study	
Performance		
Select 16 credits from the following:		16
THDA 462	Ballet I	
THDA 463	Theatre Dance I	
THDA 562	Ballet II (May be repeated to 16 cr)	
THDA 563	Theatre Dance II (May be repeated to 16 cr)	
THDA 576	Pointe	
THDA 662	Ballet III (May be repeated to 16 cr)	
THDA 663	Theatre Dance III (May be repeated to 16 cr)	
THDA 665	Aerial DanceII (May be repeated to 16 cr)	
Total Credits		**53**

[1] The practicum ensures a breadth of experience in the major, including sets, costumes, lighting, props, box office, marketing, and performing. Students must register for practicum every semester. They are notified of their practicum assignment at the beginning of each semester.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
THDA 459 or THDA 460	Stagecraft or Elements of Design	4

Performance Course		4
Discovery Course		4
Language Course		4
THDA 589	Practicum	1
	Credits	**17**
Spring		
THDA 551	Acting I	4
Performance Course		4
Discovery Course		4
Language Course		4
THDA 589	Practicum	1
	Credits	**17**
Second Year		
Fall		
THDA 487	History of Dance	4
THDA 633	Dance Composition	4
Performance Course		4
Discovery Course		4
THDA 589	Practicum	1
	Credits	**17**
Spring		
THDA 732	Choreography	4
Performance Course		4
Discovery Course		4
Discovery Course		4
THDA 589	Practicum	1
	Credits	**17**
Third Year		
Fall		
THDA 786	Dance Pedagogy	4
Performance Course		4
Fine Arts Elective Course		4
Discovery Course		4
THDA 589	Practicum	1
	Credits	**17**
Spring		
THDA 799 or THDA 798	Capstone Project or Senior Thesis	2
Performance Course		4
Fine Arts Elective Course		4
Elective in Theatre or Dance		4
THDA 589	Practicum	1
	Credits	**15**
Fourth Year		
Fall		
Performance Course		4
Elective in Theatre or Dance		4
Discovery Course		4
THDA 589	Practicum	1
	Credits	**13**
Spring		
THDA 799 or THDA 798	Capstone Project or Senior Thesis	2
Performance Course		4
Elective in Theatre or Dance		4
Discovery Course		4
THDA 589	Practicum	1
	Credits	**15**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

On completion of the B.A. in Theatre, students will:

- Recognize and distinguish between various styles and forms of theatre or dance that have shaped the evolution of these disciplines.
- Effectively communicate artistic ideas and/or critical analysis of theatre or dance works through appropriate oral, written or practical means.
- Demonstrate knowledge and fundamental skill level of the basic areas of theatre or dance production in areas related to performance, design, technology or management.
- Create and demonstrate informed and personal artistic choices in coursework and productions (i.e., design, dance, directing, acting).

On completion of the option in Dance, students will:

- Develop an awareness of proper dance technique, physical expression and kinesthetic exploration.
- Apply choreographic phrases and compositional skills through performance.
- Demonstrate a foundation in dance pedagogy.
- Demonstrate a reflective and critical awareness of dance history.
- Effectively apply dance principles to critical writing via journals, performance critiques, and research assignments.

Theatre Major: Design & Theatre Technology Option (B.A.)

https://www.unh.edu/program/bachelor-arts/theatre-design-theatre-technology

Description

The Theatre: Design and Theatre Technology option at UNH is perfect for students who are interested in blending creativity with technical expertise to shape the visual and sensory world of storytelling. Students will work with award-winning faculty who are also active professionals in the field to craft a course of study tailored to their interests. Whether you're drawn to set design, costume design, lighting design, stage management, technical direction, or costume technology, you'll gain hands-on experience in every aspect of theatrical production.

UNH's Department of Theatre and Dance produces a wide range of performances each year, including musicals, plays, and dance concerts. As a student, you'll have the opportunity to take on real design assignments, build your portfolio, and explore independent study projects. You'll also be eligible to apply for R.E.A.C.H., a unique funding

opportunity that supports internships with professional theatres and dance organizations.

This option can be paired with the Secondary Theatre Education option, preparing you to inspire the next generation of artists in K–12 classrooms.

At UNH, you won't just learn about theatre-you'll live it. Join a community where collaborative creativity thrives and your passion for design and technology can take center stage.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In the freshman and sophomore years, students should enroll for at least two major and two Discovery courses per semester.

The minimum grade requirement for major courses is C- per course. Any grade lower than C- will not count toward the major.

The required minimum overall GPA in major coursework is 2.0.

Under department policy, students who complete both COMM 401 and COMM 502 satisfy the bachelor of arts language proficiency requirement.

All majors must take courses in the following areas: performance, design/theatre technology and theory/history as well as fulfill between four and eight practicums and complete a capstone course. Although timing will vary with each option, it is strongly suggested that all introductory courses be taken prior to the end of the student's sophomore year. Students must also complete a digital portfolio that demonstrates fulfillment of student learning outcomes related to their area of study.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Theatre department majors may use one major-required course to satisfy one Discovery Program category requirement.

Code	Title	Credits
Required Courses		
THDA 436	History of Theatre I	4
or THDA 438	History of Theatre II	
THDA 459	Stagecraft	4
THDA 460	Elements of Design	4
THDA 462	Ballet I	4
or THDA 463	Theatre Dance I	
THDA 551	Acting I	4
THDA 589	Practicum (A- C) [1]	4-8
THDA 799	Capstone Project	2
Select 12 credits from the following:		12
THDA 546	Costume Design for the Theatre	
THDA 548	Stage Lighting Design and Execution	
THDA 641	Stage Management	
THDA 652	Scene Design	
Select 12 credits from the following:		12
THDA 458	Costume Construction	
THDA 475	Stage Makeup	
THDA 541	Arts Administration and Entrepreneurship	
THDA 546	Costume Design for the Theatre	
THDA 548	Stage Lighting Design and Execution	
THDA 549	Vectorworks Computer-Aided Design Drafting for the Theatre	
THDA 641	Stage Management	
THDA 652	Scene Design	
THDA 741	Directing	
Select 8 credits from the following:		8
ARTH 480	Introduction to Art History	
ARTS 510	Principles of Design	
ARTS 532	Introductory Drawing	
ARTS 546	Painting Design I: Perceptual Painting and Color Theory	
ARTS 613	Design and Place	
ARTS 614	Design and People	
THDA 532	The London Experience	
THDA 795 & THDA 796	Independent Study and Independent Study	
INCO 590 & INCO 790	Student Research Experience and Advanced Research Experience	
Total Credits		**58-62**

[1] The practicum ensures a breadth of experience in the major, including sets, costumes, lighting, props, box office, marketing, and performing. Students must register for practicum every semester. They are notified of their practicum assignment at the beginning of each semester.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
THDA 459	Stagecraft	4
THDA 460	Elements of Design	4
THDA 401	New Student Seminar	1
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
	Credits	**18**
Spring		
THDA Group I Course		4
THDA Group II Course		4
THDA Group III Course		2-4
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
	Credits	**19-21**

Second Year		
Fall		
THDA Group I Course		4
THDA Group II Course		4
THDA 589	Practicum	1
Language Course		4
Discovery Course		4
Major Elective/Minor Requirement		1-4
	Credits	**18-21**
Spring		
THDA Group I Course		4
THDA Group II Course		4
THDA 589	Practicum	1
Language Course		4
Discovery Course		4
Major Elective/Minor Requirement		1-4
	Credits	**18-21**
Third Year		
Fall		
THDA Group I Course		4
THDA Group III Course		2-4
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
Major Elective/ Minor Requirement		2-4
	Credits	**17-21**
Spring		
THDA Group III Course		2-4
THDA Group IV Course		1-4
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
Major Elective/Minor Requirement		2-4
	Credits	**14-21**
Fourth Year		
Fall		
THDA Group III Course		2-4
THDA Group IV Course		1-4
THDA 589	Practicum	1
Major Elective/Minor Requirement		4
Major Elective/Minor Requirement		4
	Credits	**12-17**
Spring		
THDA Group IV Course		1-4
THDA 799	Capstone Project	2
THDA 589	Practicum	1
Major Elective/Minor Reqirement		4
Major Elective/Minor Requirement		4
	Credits	**12-15**
	Total Credits	**128-155**

Student Learning Outcomes

Program Learning Outcomes

On completion of the B.A. in Theatre, students will:

- Recognize and distinguish between various styles and forms of theatre or dance that have shaped the evolution of these disciplines.
- Effectively communicate artistic ideas and/or critical analysis of theatre or dance works through appropriate oral, written or practical means.
- Demonstrate knowledge and fundamental skill level of the basic areas of theatre or dance production in areas related to performance, design, technology or management.
- Create and demonstrate informed and personal artistic choices in coursework and productions (i.e., design, dance, directing, acting).

On completion of the option in Design and Theatre Technology, students will:

- Exhibit an understanding of the general principles and practices for the design/tech area.
- Apply knowledge of design/tech skills and technologies to the production of theatrical creations.
- Demonstrate skills in script analysis, research, and critical thinking for design development.
- Demonstrate development of a creative process as well as practical problem-solving skills for artistic work.
- Effectively use communication and collaboration skills in writing, speaking, and visual presentation.
- Utilize critical assessment skills to evaluate the work of other students and to show improvement on their own work as a result of the collective feedback process.
- Develop a resume, portfolio, and interview skills that reflect professional standards.

Theatre Major: Musical Theatre Option (B.A.)

https://www.unh.edu/program/bachelor-arts/theatre-musical-theatre

Description

The Theatre Major: Musical Theatre Option at UNH offers a comprehensive education in musical theatre performance and history. Our program seeks to train actors who sing and dance, with classes in acting, voice, and various dance styles as well as a full musical theatre performance curriculum. Students also gain hands-on experience through required practicums and opportunities to perform in mainstage shows, student showcases, musical theatre studios and cabarets. Students in the program enjoy focused training in musical theatre, including a senior showcase and opportunities to create professional contacts with guest artists and through student trips to the Southeastern Theatre Conference (SETC) and the Kennedy Center American College Theatre Festival (KCACTF), all while earning a well-rounded theatrical education under the liberal arts umbrella of the university. Students can also take advantage of study abroad trips and practical internships.

From Broadway to cabaret, musical theatre is a genre that continues to captivate generations by combining acting, song and dance. In this Theatre degree program at UNH, you'll develop and refine your talents

in performance, movement, and voice while also studying the history of theatre and musical theatre. Our program gives you a well-rounded experience for future work in theatre, affording the opportunity to perform in faculty- and student-directed productions while also gaining hands-on experience through audition courses, visits from guest artists, and student showcases and trips.

In addition to our award-winning faculty, the UNH Department of Theatre and Dance offers numerous performance opportunities every year in musicals, plays or dance concerts, including student productions. Our students get opportunities to ease into the professional world through experiences in class and in our curriculum. Our January Term study-abroad program offers a 10-day experience of London theatre, and we partner with Actor's Connection in New York City to provide a senior showcase for industry professionals before students graduate.

Contact Tom Alsip (thomas.alsip@unh.edu), Paul Creative Arts Center, (603) 862-3288.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In the freshman and sophomore years, students should enroll for at least two major and two Discovery courses per semester.

The minimum grade requirement for major courses is C- per course. Any grade lower than C- will not count toward the major.

The required minimum overall GPA in major coursework is 2.0.

Under department policy, students who complete both COMM 401 and COMM 502 satisfy the bachelor of arts language proficiency requirement.

All majors must take courses in the following areas: performance, design/theatre technology and theory/history as well as fulfill between four and eight practicums and complete a capstone course. Although timing will vary with each option, it is strongly suggested that all introductory courses be taken prior to the end of the student's sophomore year. Students must also complete a digital portfolio that demonstrates fulfillment of student learning outcomes related to their area of study.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Theatre department majors may use one major-required course to satisfy one Discovery category requirement.

Code	Title	Credits
Required Courses		
THDA 436	History of Theatre I	4
or THDA 438	History of Theatre II	
THDA 450	History of Musical Theatre in America	4
THDA 455	Musicianship and Beginning Vocal Techniques for Musical Theatre	2
THDA 459	Stagecraft	4
THDA 460	Elements of Design	4
THDA 462	Ballet I	2-4
or THDA 562	Ballet II	
THDA 463	Theatre Dance I	4
THDA 500	Musical Theatre Voice I	1
THDA 551	Acting I	4
THDA 555	Acting The Song	4
THDA 563	Theatre Dance II	2
THDA 570	Movement & Vocal Production	4
THDA 589	Practicum (A - C) [1]	1
THDA 600	Musical Theatre Voice II	1
THDA 655	Musical Theatre Scene Study	4
THDA 700	Musical Theatre Voice III (repeatable)	1
THDA 755	Musical Theatre Repertoire	4
THDA 799	Capstone Project	2
Dance - Select 2 credits from the following:		2
THDA 562	Ballet II	
THDA 563	Theatre Dance II	
THDA 565	Aerial Dance I	
THDA 576	Pointe	
THDA 662	Ballet III	
THDA 663	Theatre Dance III	
THDA 665	Aerial DanceII	
Total Credits		**54-56**

[1] The practicum ensures a breadth of experience in the major, including sets, costumes, lighting, props, box office, marketing, and performing. Students must register for practicum every semester. They are notified of their practicum assignment at the beginning of each semester.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
THDA 455	Musicianship and Beginning Vocal Techniques for Musical Theatre	2
THDA 551	Acting I	4
THDA 401	New Student Seminar	1
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
THDA 555	Acting The Song	4
THDA 459	Stagecraft	4
THDA 462	Ballet I	4
THDA 589	Practicum	1
Discovery Course		4

Discovery Course		4
	Credits	**21**
Second Year		
Fall		
THDA 463	Theatre Dance I	4
THDA 570	Movement & Vocal Production	4
THDA 589	Practicum	1
Language Course		4
Discovery Course		4
THDA 500	Musical Theatre Voice I	1
	Credits	**18**
Spring		
THDA 438	History of Theatre II	4
THDA 563	Theatre Dance II	2
THDA 589	Practicum	1
Language Course		4
Discovery Course		4
THDA 600	Musical Theatre Voice II	1
	Credits	**16**
Third Year		
Fall		
THDA 460	Elements of Design	4
THDA 563	Theatre Dance II	2
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
THDA 700	Musical Theatre Voice III	1
Major Elective/Minor Requirement		2-4
	Credits	**18-20**
Spring		
THDA 755	Musical Theatre Repertoire	4
Major Elective/Minor Requirement		2-4
THDA 589	Practicum	1
Discovery Course		4
Discovery Course		4
THDA 700	Musical Theatre Voice III	1
	Credits	**16-18**
Fourth Year		
Fall		
THDA 450	History of Musical Theatre in America	4
THDA 655	Musical Theatre Scene Study	4
THDA 589	Practicum	1
Major Elective/Minor Requirement		4
Major Elective/Minor Requirement		4
	Credits	**17**
Spring		
THDA 700	Musical Theatre Voice III	1
THDA 799	Capstone Project	2
THDA 589	Practicum	1
Major Elective/Minor Requirement		4
Major Elective/Minor Requirement		4
	Credits	**12**
	Total Credits	**134-138**

Student Learning Outcomes

Program Learning Outcomes

On completion of the B.A. in Theatre, students will:

- Recognize and distinguish between various styles and forms of theatre or dance that have shaped the evolution of these disciplines.
- Effectively communicate artistic ideas and/or critical analysis of theatre or dance works through appropriate oral, written or practical means.
- Demonstrate knowledge and fundamental skill level of the basic areas of theatre or dance production in areas related to performance, design, technology or management.
- Create and demonstrate informed and personal artistic choices in coursework and productions (i.e., design, dance, directing, acting).

On completion of the option in Musical Theatre, students will:

- Utilize a healthy vocal technique and demonstrate the ability to read music.
- Effectively analyze a dramatic script.
- Apply knowledge of theatre to write critically about both musical and non-musical theatre.
- Demonstrate the ability to perform dance choreography.
- Apply acting techniques both in writing and in practice.
- Utilize knowledge of musical theatre history and styles to select appropriate repertoire for class and auditions.
- Demonstrate the skills and create the elements necessary to compete in the professional theatrical world, including a professional resume and audition book.

Theatre Major: Secondary Theatre Education Option (B.A.)

https://www.unh.edu/program/bachelor-arts/theatre-secondary-theatre-education

Description

The Theatre Major: Secondary Theatre Education Option at UNH prepares students to teach and direct theatre for K-12 students. The curriculum includes theatre history, directing, design, theatre technology, and teaching methods, with practical teaching experience. Graduates can pursue careers as teaching artists, obtain NH K-12 Theatre Arts teacher licensure as an undergraduate or continue to a fifth-year master's program. With over 25 annual performances and opportunities for independent study, the program offers real-world experience, departmental financial assistance, and strong preparation for careers in teaching or youth theatre.

One of only a few programs of its kind in the country, UNH's Secondary Theatre Education Option will prepare you to teach theatre and direct productions with students in kindergarten through 12th grade. You'll study the history of theatre, directing, the elements of design and theatre technology, and methods of teaching in theatre. You'll gain hands-on

practical teaching experience with K-12 students. As you complete your studies, you will have the option to enter theatre education directly as a teaching artist at professional theatres, get NH Theatre Arts K-12 teacher licensure, or pursue a fifth-year Master's in Teaching program through the UNH Education Department.

In addition to our award-winning faculty, the UNH Department of Theatre and Dance offers more than 25 performance opportunities every year in musicals, plays or dance concerts, including student productions. You'll be able to pursue independent studies and be eligible to apply for R.E.A.C.H., financial assistance provided to students who participate in internships with professional theatres or dance organizations. Our theatre education courses provide multiple practical teaching experiences so that you know before the end of your senior year whether teaching K-12 suits your career goals. With the addition of undergraduate or graduate teacher licensure, you'll be well-positioned to pursue a career in teaching or youth theatre.

Contact Raina Ames (raina.ames@unh.edu), Paul Creative Arts Center, (603) 862-3044.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In the freshman and sophomore years, students should enroll for at least two major and two Discovery courses per semester.

The minimum grade requirement for major courses is C- per course. Any grade lower than C- will not count toward the major.

The required minimum overall GPA in major coursework is 2.0.

Under department policy, students who complete both COMM 401 and COMM 502 satisfy the bachelor of arts language proficiency requirement.

All majors must take courses in the following areas: performance, design/theatre technology and theory/history as well as fulfill between four and eight practicums and complete a capstone course. Although timing will vary with each option, it is strongly suggested that all introductory courses be taken prior to the end of the student's sophomore year. Students must also complete a digital portfolio that demonstrates fulfillment of student learning outcomes related to their area of study.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Theatre department majors may use one major-required course to satisfy one Discovery category requirement.

Code	Title	Credits
Required Courses		
THDA 436	History of Theatre I	4
THDA 438	History of Theatre II	4
THDA 459	Stagecraft	4
THDA 460	Elements of Design	4
THDA 463	Theatre Dance I	4
THDA 475	Stage Makeup	2
THDA 551	Acting I	4
THDA 589	Practicum (A - C) [1]	3-8
THDA 624	Theatre for Young Audiences	4
THDA 721	Arts Integration	4
THDA 727	Methods of Teaching Theatre [2]	4
THDA 729	Community Oriented Drama Programs	4
THDA 741	Directing	4
THDA 760	Teacher Planning for Theatre	4
THDA 799	Capstone Project (must be taken in senior year)	2
Design/Theatre Technology		
Select 4 credits of the following:		4
THDA 458	Costume Construction	
THDA 546	Costume Design for the Theatre	
THDA 548	Stage Lighting Design and Execution	
Education		
EDUC 500	Exploring Teaching [2]	4
Total Credits		**63-68**

1 Students are required to take at least one practicum for every semester they are a major in the Department of Theatre and Dance. In addition, each student must take each type of practicum at least once (Technical, Costume, Performance, Marketing and Promotion).
2 May be taken at the undergraduate level or the graduate level.

NOTE: It is understood that students will fulfill 20 internship contact hours with theatre students in their option area: elementary, middle, or high school. Projects for THDA 729 Community Oriented Drama Programs cannot count as internship hours. Students may fulfill this requirement through a variety of teaching opportunities with the department's outreach program (both during the school year and in the summer), or they may work with local schools teaching, coaching actors, assistant directing, choreographing, or in some other capacity as specifically arranged with their theatre adviser.

It also is understood that students involved in the above course curriculum in order to get state theatre arts certification must apply to either the UNH Department of Education or another university for acceptance into a fifth-year master of arts in teaching (M.A.T.) or master of education (M.Ed.) degree program that fulfills state requirements for certification.

State K-12 Teacher Certification

In order to obtain state theatre arts certification, students must either know from their first year that they are pursuing undergraduate Theatre Arts teacher certification or they must apply to the UNH Department of Education or another university for acceptance into a fifth-year master of arts in teaching (M.A.T.) or masters of education (M.Ed.) degree program, which fulfills state requirements for certification. Students who are accepted into early graduate admission may take up to 12 credits toward the 32 credit masters while finishing their undergraduate degree. For further clarification regarding both undergraduate and graduate

certification options, contact Raina Ames, Paul Creative Arts Center, (603) 862-3044, raina.ames@unh.edu.

4-Year Teacher Licensure B.A. Program

The 4-year teacher licensure B.A. program includes the same requirements as the B.A. secondary theatre education option but with the following modifications.

- The THDA 798/799 requirement is replaced with EDUC 694 Courses in Supervised Teaching
- The following requirements are added.

Code	Title	Credits
EDUC 605	Educational Perspectives in Critical Times	4
EDUC 694	Courses in Supervised Teaching	8
EDUC 701	Human Development & Learning: Cultural Perspectives	4
EDUC 751A	Inclusive Elementary Education: Literacies and Learning for Diverse Learners	4
or EDUC 751B	Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	
THDA 791	Internship in Theatre and Dance	2

5-Year Teacher Licensure M.A.T. or M.Ed. Program

The 5-year teacher licensure M.A.T. or M.Ed. Program includes the same requirements as the B.A. secondary theatre education option but with the following modifications:

- The following requirements are added.

Code	Title	Credits
EDUC 605	Educational Perspectives in Critical Times [1]	4
EDUC 701/801	Human Development & Learning: Cultural Perspectives [2]	4
EDUC 751A	Inclusive Elementary Education: Literacies and Learning for Diverse Learners [2]	4
or EDUC 851A	Inclusive Elementary Education: Literacies and Learning for Diverse Learners	
or EDUC 751B	Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	
or EDUC 851B	Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions	
EDUC 900A	Internship and Seminar in Teaching	6
EDUC 901A	Internship and Seminar in Teaching	6
8 credits from THDA 700-level or EDUC 700/800-level elective courses. [2]		8

[1] Must be taken before the teaching internship.
[2] Must be taken before the teaching internship. May be taken at the undergraduate level or the graduate level.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
Discovery Course		4
Discovery Course		4
THDA Course		4
THDA Course		4
THDA 401	New Student Seminar	1
THDA 589	Practicum	1
	Credits	**18**
Spring		
Discovery Course		4
Discovery Course		4
THDA Course		4
THDA Course		4
THDA 589	Practicum	1
Major Elective/Minor Course		0-4
	Credits	**17-21**
Second Year		
Fall		
Discovery Course		4
Language Course		4
THDA Course		4
THDA Course		4
THDA 589	Practicum	1
Major Elective/Minor Course		0-4
	Credits	**17-21**
Spring		
Discovery Course		4
Language Course		4
THDA Course		2
THDA Course		4
THDA 589	Practicum	1
EDUC 500	Exploring Teaching	4
	Credits	**19**
Third Year		
Fall		
Discovery Course		4
Discovery Course		4
THDA Course		4
THDA 522	Storytelling, Story Theatre, and Involvement Dramatics	4
THDA 589	Practicum	1
Major Elective/Minor Course		0-4
	Credits	**17-21**
Spring		
Discovery Course		4
Discovery Course		4
THDA Course		4
THDA Course		4
THDA 589	Practicum	1
Major Elective/Minor Course		0-4
	Credits	**17-21**
Fourth Year		
Fall		
THDA Course		4
THDA Course		4
THDA Course		4
THDA 589	Practicum	1
Major Elective/Minor Course		4-8
	Credits	**17-21**
Spring		
Major Elective/Minor Course		12-16
THDA 799	Capstone Project	2

THDA 589	Practicum	1
	Credits	**15-19**
	Total Credits	**137-161**

Student Learning Outcomes

Program Learning Outcomes

On completion of the B.A. in Theatre, students will:

- Recognize and distinguish between various styles and forms of theatre or dance that have shaped the evolution of these disciplines.
- Effectively communicate artistic ideas and/or critical analysis of theatre or dance works through appropriate oral, written or practical means.
- Demonstrate knowledge and fundamental skill level of the basic areas of theatre or dance production in areas related to performance, design, technology or management.
- Create and demonstrate informed and personal artistic choices in coursework and productions (i.e., design, dance, directing, acting).

On completion of the option in Secondary Theatre Education, students will:

- Develop and compile effective lesson plans and teaching materials appropriate to student developmental levels and individual learning styles.
- Define a personal teaching philosophy.
- Demonstrate effective teaching strategies.
- Evaluate teaching abilities through analysis and reflection.
- Develop directing and production skills.
- Match to teaching materials the appropriate national educational standards for arts and non-arts subjects.

Disclosures

Theatre Major: Secondary Theatre Education Option (B.A.)

Location/Delivery: College of Liberal Arts, Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Theatre K-12

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Arts Administration Minor

https://www.unh.edu/program/minor/arts-administration

Description

The Arts Administration Minor is designed to develop the skillset necessary for work in the#diverse field of arts management and arts entrepreneurship. You'll gain experience in#accounting, marketing, and business administration as well as other critical areas that help prepare students for careers in the nonprofit and for-profit arts sectors. The knowledge acquired in this minor is also designed to be applied to the development, funding, marketing and management of projects created by fine and performing artists.

The award-winning faculty in the UNH Departments of Theatre and Dance, Music and Art offer students an enormous spectrum of fine and performing arts opportunities and learning experiences to connect and enhance the study of Arts Administration. #The Paul College of Business and Economics is one of the nation's top ranked business schools with renowned faculty in the areas of marketing, management, finance and accounting. This unique minor is designed to bring exposure to the arts for non-fine and performing arts majors, and business-related skills for those in the arts.

Contact David Kaye (david.kaye@unh.edu), (603) 862-0667.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
ACC 501	Survey of Accounting	4
or ADMN 502	Financial Accounting	
MKTG 530	Survey of Marketing	4
or ADMN 585	Marketing	
THDA 541	Arts Administration and Entrepreneurship	4
Elective Courses		**8**
For students pursuing majors in The Peter T Paul School of Business or the fine and performing arts division of COLA: Two elective courses from the following list (electives must be taken outside your home college unless indicated). For all other students, two elective courses from the following list. At least one elective course must be in the fine or performing arts.		
ARTH 400	Topics in Art History	
ARTH 480	Introduction to Art History	
ARTS 510	Principles of Design [1]	
ARTS 532	Introductory Drawing	
ARTS 552	Introductory Digital Photography	
MGT 520	Topics in Management (Thinking Like an Entrepreneur, Negotiations)	
MGT 540	Leading with Impact: Strategies for Modern Leadership	
MGT 640	Human Resource Management	
MKTG 547	Promotion and Advertising	
MKTG 649	Foundations of Personal Selling	
MKTG 520	Topics in Marketing (Understanding Your Customer)	
PAUL 450	Personal Finance	
RMP 680	Festival and Community Event Planning	
THDA 442	Introduction to the Art of Acting	
THDA 459	Stagecraft	
THDA 462	Ballet I	

THDA 463	Theatre Dance I	
THDA 548	Stage Lighting Design and Execution	
THDA 555	Acting The Song	
THDA 641	Stage Management	
THDA 791	Internship in Theatre and Dance [2]	
Total Credits		**20**

1 This course can be taken by students pursuing majors in the fine and performing arts division of COLA. This course cannot also be used toward completion of any major in Art and Art History.

2 This course can be taken by students pursuing majors in the fine and performing arts division of COLA. This course cannot also be used toward completion of the Theatre & Dance major. Course must be specifically focused on Arts Administration.

Dance Minor

https://www.unh.edu/program/minor/dance

Description

The Dance Minor at UNH is a dynamic complement to any major, offering students a well-rounded introduction to the art of dance. This program provides a comprehensive curriculum in dance technique, theory, and performance, allowing students to develop artistic and professional skills in a supportive environment. With its comprehensive curriculum and rich performance opportunities, the Dance Minor equips students to pursue their passion for dance while enhancing career prospects in both artistic and interdisciplinary fields.

Dance Minors at UNH have the opportunity to study diverse dance styles, including Ballet, Pointe, Jazz, Tap, Musical Theatre, and Aerial Dance. The program also includes courses in dance history, choreography, composition and pedagogy, as well as innovative offerings like Dance Technology (Compocinema) and Famous Dancers of the 21st Century.

Students are encouraged to participate in the department's extensive annual performances, such as the UNH Dance Company Concert, Ballet Showcases, and Aerial Dance Showcases. Professional development opportunities include internships, guest artist workshops, and study-abroad experiences like The London Experience, which explores the intersections of theatre, dance, and culture.

Contact Gay Nardone (gay.nardone@unh.edu), (603) 862-1728

Requirements

Academic policies related to Minors.

Students who major in Theatre or one of its theatre options may minor in Dance provided no more than 8 credits are used to satisfy both major and minor requirements.

Code	Title	Credits
Required Courses		
Select up to 16 credits from the following:		16
THDA 462	Ballet I	
THDA 562	Ballet II	
THDA 662	Ballet III	
THDA 463	Theatre Dance I	
THDA 563	Theatre Dance II	
THDA 663	Theatre Dance III	
THDA 565	Aerial Dance I	
THDA 665	Aerial DanceII	
THDA 576	Pointe	
Select at least 4 credits from the following: [1]		4
THDA 633	Dance Composition	
THDA 564	Compocinema	
THDA 732	Choreography	
THDA 786	Dance Pedagogy	
Total Credits		**20**

1 Courses in this section are taught on a rotational basis and are not offered every semester. Students are encouraged to fulfill this requirement by the end of their Junior year. Course substitutions in this section are not permitted.

Musical Theatre Minor

https://www.unh.edu/program/minor/musical-theatre

Description

From Broadway to cabaret, musical theatre is a genre that continues to captivate generations by combining acting, song, and dance. In the Musical Theatre Minor at UNH, you'll develop and refine your talents in performance, movement, and voice while studying the history of theatre and musical theatre. You'll have the opportunity to perform in faculty- and student-directed productions. You can combine this minor with a major such as Business or Music, or you can pursue a major in Theatre or one of its other theatre or dance options to receive a well-rounded experience for future work in theatre.

In addition to our award-winning faculty, the UNH Department of Theatre and Dance offers numerous performance opportunities every year in musicals, plays or dance concerts, including student productions. Our students get opportunities to ease into the professional world through experiences in class and in our curriculum. Our January Term study-abroad program offers a 10-day experience of London theatre, and we partner with Actor's Connection in New York City to provide a senior showcase for industry professionals before students graduate.

Contact Tom Alsip (Thomas.Alsip@unh.edu), (603) 862-3288

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
THDA 441	Exploring Musical Theatre	4
or THDA 450	History of Musical Theatre in America	
THDA 442	Introduction to the Art of Acting	4
or THDA 551	Acting I	
THDA 463	Theatre Dance I	4
THDA 555	Acting The Song	4
Select one THDA course [1]		4
Total Credits		**20**

1 Excluding THDA 500 Musical Theatre Voice I, THDA 600 Musical Theatre Voice II, and THDA 700 Musical Theatre Voice III

Theatre Minor

https://www.unh.edu/program/minor/theatre

Description

Pursue your passion for the performing arts with the Theatre Minor. Learn about the history and literature of theatre, as well as performing arts skills, design and theatre technology. Tailor the minor to your interests with courses in acting, dance, voice, playwriting, directing, arts administration, stagecraft, puppetry, theatre education and musical theatre. You'll have the opportunity to participate in full-scale theatrical productions offered by our department. Combine the Theatre Minor with any degree, or major in another theatre or dance option, literature, art, music or business to enhance your career opportunities or future studies. In addition to our award-winning faculty, the UNH Department of Theatre and Dance offers various performance opportunities every year in musicals, plays and dance concerts, including student productions. Students can also take part in the January Term study-abroad program, which offers a 10-day experience of London theatre and insights into politics and societal issues.

Contact Szu-Feng Chen (szu-feng.chen@unh.edu), (603) 862-4445.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Requirements		
THDA 442	Introduction to the Art of Acting	4
or THDA 460	Elements of Design	
Select 4 credits of the Theory/History courses in the General Theatre Major Requirements		4
Select 4 credits of the Design/Theatre Technology courses in the General Theatre Major Requirements		4
Select 8 credits of any THDA course		8
Total Credits		**20**

Youth Drama Minor

https://www.unh.edu/program/minor/youth-drama

Description

If you want to connect with children through the dramatic arts in settings inside or outside the classroom, the Youth Drama Minor is for you. Whether you're interested in elementary school teaching or working as an artist, you'll learn skills in storytelling and theatre, and you'll have the opportunity to work with our master puppeteer. You'll also explore the values and practice of incorporating the arts into a non-arts educational setting. Combine this minor with a major such as business, social work or education, with the option to pursue a fifth-year master's degree in teaching through the UNH Department of Education. In addition to our award-winning faculty, our Department of Theatre and Dance offers more than 25 performance opportunities every year in musicals, plays and dance concerts, including student productions.

Contact Raina Ames (raina.ames@unh.edu), (603) 862-3044.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
THDA 522	Storytelling, Story Theatre, and Involvement Dramatics	4
THDA 583	Introduction to Puppetry	4
THDA 624	Theatre for Young Audiences	4
THDA 721	Arts Integration	4
Select 4 credits from the following:		4
THDA 683	Advanced Puppetry	
THDA 727	Methods of Teaching Theatre	
THDA 729	Community Oriented Drama Programs	
THDA 760	Teacher Planning for Theatre	
Total Credits		**20**

Studies in Fashion and Design Cognate

https://www.unh.edu/program/cognate/studies-fashion-design

Description

The Studies in Fashion and Design cognate offers students a foundation for developing the basic skills to enter the field of fashion design. It introduces the art behind the creation of apparel and the basics of marketing strategy connected to fashion design. Students will be educated to develop their own creative process and design method while learning the basic knowledge of marketing and personal business. The cognate prepares students with a means to combine their artistic vision with practical application and helps them become designers who have the skills to support their own artistries.

Students complete coursework selected from three groups:

1. Design Creation: Helps students to adapt their artistic skills to support conceptual ideas. It gives students abilities in creating, analyzing, constructing and presenting works for costume creation. It aims to guide students in developing their own working process with a critical approach to problem solving. Students will be able to use terminology to communicate ideas in the fashion design industry.
2. Design Skills: Gives students the options to understand and apply a skill class of their choice to help them articulate their design ideas visually and digitally. It aims to offer students options to create visual merchandising for their design works through rendering hand skills, graphic design software, or photography.
3. Marketing: Helps students to understand and incorporate business aspects into their creative works. It aims to prepare students to promote and sustain their creative works independently as a personal business or within retail organizations.

Requirements

Student must complete three courses (12 credits), one course in each group listed below.

Code	Title	Credits
Design Creation		
Select one course from the following:		4
THDA 546	Costume Design for the Theatre	

THDA 458	Costume Construction	
Design Skills		
Select one course from the following:		4
ARTS 510	Principles of Design	
ARTS 552	Introductory Digital Photography	
Marketing		
Select one course from the following:		4
MKTG 530	Survey of Marketing	
MKTG 547	Promotion and Advertising	
MKTG 649	Foundations of Personal Selling	
Total Credits		**12**

Studies in the Design of Interior Space Cognate

https://www.unh.edu/program/cognate/studies-design-interior-space

Description

This cognate provides students a pathway to enter the world of interior design. It aims to give students an overview of design creation and execution for space planning. From concept development to project execution, the cognate allows students to formulate design projects that are both practical and aesthetically pleasing. Students will develop a comprehensive creative process through research, problem solving and project development. The cognate prepares students to apply critical thinking to the creation of interior environments utilizing a human-centered approach.

Students complete coursework selected from three groups:

1. Design Development: Helps students obtain the skills in design creation. Students will learn about concept development, research analysis, and psychological and physiological characteristics in space planning. It provides students with the ability to utilize knowledge in design elements and principles in 3D design creation and integrate this knowledge into design concepts as solutions for design projects.
2. Historical Aspect: Gives students an overview of architectural history. It will help students to identify the historical, political, social and economic elements that have influenced the evolution of interior architecture and decorative arts. Students will be able to apply their skills in research and their knowledge of historic design styles in their design creations.
3. Design Skills: Helps students to understand and apply skills related to design execution. It provides students with the option to gain craftsmanship in sketching, rendering, scaled design drawings, CAD (computer-aided drafting), graphic solutions or standards.

Requirements

Student must complete three courses (12 credits), one course in each group listed below.

Code	Title	Credits
Design Development		**4**
Select one course from the following:		
THDA 548	Stage Lighting Design and Execution	
THDA 652	Scene Design	
ARTS 520	Principles of Architectural Design	
Historical Aspect		**4**
Select one course from the following:		
ARTH 474	Introduction to Architectural History	
ARTH 480	Introduction to Art History	
Design Skills		**4**
Select one course from the following:		
ARTS 613	Design and Place	
THDA 549	Vectorworks Computer-Aided Design Drafting for the Theatre	
Total Credits		**12**

Women's and Gender Studies (WGS)

Women's and gender studies provides students with an understanding of the status of women in various cultures and historical eras, in the nexus of race, class, sexuality, religious and disability studies. Students learn the use of gender as a category of analysis and increase their knowledge of women's contributions to many fields. Women's and gender studies courses offer students critical perspectives on such basic questions of the social order as assumptions about gender roles and gender identity.

As a relatively small department in the College of Liberal Arts, we provide students with a sense of community and opportunities to contribute directly to changing the campus climate. In a rigorous academic environment, women's and gender studies offers students a springboard for activism. Our internship program enables students to gain first-hand work experience across many fields.

A major or minor in women's and gender studies or social justice leadership prepares students for careers where the changing roles of women are having a perceptible impact. Women's studies graduates go on to law school and graduate school in a variety of disciplines. Some have taken positions with social change or family service agencies, while others have found work in such fields as health care, journalism, education, human rights, social and environmental justice, and the arts.

https://cola.unh.edu/womens-gender-studies

Programs

- Women's and Gender Studies Major (B.A.) (p. 369)
- Social Justice Leadership Minor (p. 371)
- Women's and Gender Studies Minor (p. 372)

Faculty

Women's and Gender Studies Department Faculty

Women's and Gender Studies Major (B.A.)

https://www.unh.edu/program/bachelor-arts/womens-gender-studies

Description

Women's and gender studies provides students with an understanding of the status of women in various cultures and historical eras, in the nexus of race, class, sexuality, religious and disability studies. Students learn the use of gender as a category of analysis and increase their knowledge of women's contributions to many fields. Women's and gender studies courses offer students critical perspectives on such basic questions of the social order as assumptions about gender roles and gender identity.

As a relatively small department in the College of Liberal Arts, we provide students with a sense of community and opportunities to contribute directly to changing the campus climate. In a rigorous academic environment, women's and gender studies offers students a springboard for activism. Our internship program enables students to gain first-hand work experience across many fields.

A major in women's and gender studies prepares students for careers where the changing roles of women are having a perceptible impact. Women's and gender studies graduates go on to law school and graduate school in a variety of disciplines. Some have taken positions with social change or family service agencies, while others have found work in such fields as health care, journalism, education, human rights, social and environmental justice, and the arts.

Students who wish to major in women's and gender studies should consult with the department chair or coordinator.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The Women's and Gender Studies (WGS) major requires students to complete 40 credits of major-approved coursework with grades of C- or better and an overall grade point average in major courses of 2.00 or higher.

Code	Title	Credits
Required Courses		
WGS 401W	Introduction to Women's Studies	4
or WGS 405	Gender, Power and Privilege	
WGS 505	Survey in Women's Studies	4
WGS 632W	Feminist Thought	4
Discovery Program Capstone		
WGS 798W	Colloquium	4
WGS-Approved Electives		
Select six (6) courses approved for the WGS major as elective coursework from the list below.		24
Total Credits		**40**

WGS-Approved Electives

Select six (6) elective courses chosen in consultation with a WGS academic advisor.

- No more than one (1) course at the 400-level
- At least three (3) courses at the 600-level or above
- At least two (2) WGS courses

Click here to view a list of additional courses offered and approved for the WGS major as elective coursework.

Code	Title	Credits
WGS-Approved Electives		
WGS Courses (select at least 2)		
WGS 444A	Race Matters	4
WGS 505	Survey in Women's Studies	4
WGS 795	Independent Study	1-4
WGS 797	Internship	4
WGS 798W	Colloquium	4
WGS 799H	Honors Thesis	4
Additional courses approved for the WGS major (select no more than 5)		
ANTH 525	Anthropology of the Body: Fat, Fitness and Form	4
ANTH 625	Sexuality in Cross-Cultural Perspective	4
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa	4
CLAS 550A	Identities and Difference in the Ancient World: Greek and Roman Women	4
CMN 567	Gender, Race, and Class in the Media	4
CMN 614	Gender, Race and Technology	4
CMN 685	Gendered Rhetorics	4
ENGL 575	Sex and Sensibility: The Rise of Chick Lit	4
ENGL 585	Introduction to Women in Literature	4
ENGL 728	Language and Gender	4
ENGL 778	Race and Gender in Film and Popular Culture	4
HIST 565	Women in Modern Europe	4
HIST 665	Themes in Women's History	4
INCO 505A	Becoming a Problem Solver	4
INCO 505I	Internship: Semester in the City (Boston) or Semester for Impact (NH)	8
INCO 682A	The Washington Center Career Readiness Seminar	4
INCO 682I	Washington DC Internship	4 or 8
ITAL 444B	Mamma Mia! Italian Motherhood from the Virgin Mary to Carmela Soprano	4
JUST 410	Sexual Harassment and Rape Prevention (SHARPP) Peer Advocacy	2-4
JUST 520	Girls Gone Bad: Delinquent Girls in Cultural Context	4
NURS 450	Making Babies: Technology, Nature, and Social Context	4
NURS 621	Maternal and Newborn Nursing	1-2
NURS 621C	Maternal Newborn Nurs Clin	2
PHIL 419	Race, Gender and Social Justice	4
PHIL 510	Philosophy and Feminism	4
POLT 511	Women & Politics	4
POLT 721	Feminist Political Theory	4
SOC 570	Sexual Behavior	4
SW 715	Affirming Practice with Lesbian, Gay, Bisexual, Transgender, Queer+ People	4

Women's and Gender Studies majors may use two major-required courses to satisfy two Discovery category requirements. First and second majors may double count no more than two courses between the WGS major and another major or minor.

Candidates for a degree must satisfy all of the University Discovery Program requirements in addition to satisfying the requirements of each individual major program. Bachelor of arts candidates must also satisfy the foreign language proficiency requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		Credits
ENGL 401	First-Year Writing	4
Physical or Biological Science Discovery requirement (no lab)		4
Quantitative Reasoning Discovery requirement		4
WGS 401W or WGS 405	Introduction to Women's Studies or Gender, Power and Privilege	4

WGS 505	Survey in Women's Studies	4
COLA foreign language requirement (depending on proficiency an additional course may be needed)		4
Additional foreign language course (if needed) or Elective		4
Elective		4
	Credits	**32**
Second Year		
Consider including experiential learning or study abroad opportunities in your second or third year.		
Three (3) courses approved as WGS elective coursework		12
WGS 632W	Feminist Thought	4
Physical or Biological Science Discovery requirement (with lab)		4
Humanities or Social Science Discovery requirement		4
Two (2) electives (for minor or second major)		8
	Credits	**32**
Third Year		
Consider including experiential learning or study abroad opportunities in your second or third year.		
WGS 798W	Colloquium	4
Two (2) courses at the 600-level or above approved as WGS elective coursework		8
World Cultures Discovery requirement		4
Four (4) electives (for minor or second major)		16
	Credits	**32**
Fourth Year		
WGS Capstone: WGS 798W		4
Second Major Capstone (if applicable) or elective		4
Two (2) Discovery courses (if applicable) or electives		8
Four (4) electives (for minor or second major)		16
	Credits	**32**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate the ability to think critically about categories of difference—including gender, sexuality, race, nation, class, religion-- and explore the relationship between inequality and those categories of difference.
- Demonstrate understanding of how difference influences the values, beliefs, and experiences of individuals and groups in across historical, cultural, political and geographic contexts.
- Define and apply central concepts in Women's and Gender Studies and Queer Studies, including but not limited to sexuality, power, privilege, inequality, justice, violence, the body, reproductive health, and intersectionality (i.e., interlocking and simultaneous forms of oppression).
- Know the history of feminist thought and production, especially as it has been inflected by cultural difference.
- Demonstrate self-reflectiveness, cultural awareness, critical analysis, and the ability to effect personal and community change.
- Write and speak clearly, be able to construct persuasive arguments based on their experiences, the experiences of others, and on scholarship; be able to conduct research using feminist methodologies.

Social Justice Leadership Minor

https://www.unh.edu/program/minor/social-justice-leadership

Description

The minor in social justice leadership engages students in an exploration of policies, power dynamics, institutions and structures that promote and hinder equity and processes of change required for social justice. Students will examine various forms of injustice such as sexism, racism, classism, ableism and environmental degradation. The minor is grounded in three pillars — a theory component, a leadership component and experiential learning activities. The minor is interdisciplinary in nature, drawing on disciplines such as anthropology, education, English, history, philosophy, political science, social work and sociology. After completing the curriculum, students will have gained a historical perspective, theoretical understanding and applied leadership skills that are needed for social justice work and activism. The minor certifies students' knowledge regarding, and commitment to, social justice leadership, which will be useful in postgraduate pursuits.

Students who wish to minor in social justice leadership should consult with the department chair or coordinator.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
Theory		
WGS 401W	Introduction to Women's Studies	4
or WGS 405	Gender, Power and Privilege	
Leadership		
WGS 505	Survey in Women's Studies (Leadership Part I)	4
Applied		
Select one capstone course from the following (normally taken at the end of the course sequence):		4
WGS 798W	Colloquium	
or other relevant approved capstone dealing with social justice leadership issues		
Electives		
Select two electives in Social Justice and/or Leadership from the approved electives list below.		8
Total Credits		**20**

Approved Electives

Code	Title	Credits
Courses in the Women's and Gender Studies Department		
WGS 444A	Race Matters	4
WGS 505	Survey in Women's Studies (Leadership in the Real World)	4
WGS 510	Framing Feminism: Gender Politics in Film	4
WGS 632W	Feminist Thought	4
WGS 796	Advanced Topics	4
WGS 797	Internship	4
WGS 798W	Colloquium (such as Women in Prison)	4
Courses in Other College of Liberal Arts Departments		
ANTH 500	Peoples and Cultures of the World (Sub-Saharan Africa)	4
ANTH 625	Sexuality in Cross-Cultural Perspective	4
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa	4
CMN 505	Analysis of Popular Culture	4
CMN 567	Gender, Race, and Class in the Media	4
EDUC 500	Exploring Teaching	4

ENGL 585	Introduction to Women in Literature (Dreamgirls: Studies in Beautiful Blackness)	4
ENGL 693	Special Topics in Literature (Literary Responses to the Holocaust)	4
ENGL 738	Asian American Studies	4
HIST 566	Comparative Revolutions: How to Make a Revolution in the World before Marx	4
HIST 665	Themes in Women's History (Gender & Politics)	4
HIST 690	Seminar: Historical Expl (Gay & Lesbian History: From the Victorian Era to Stonewall)	4
HIST 797	Colloquium (Citizenship & Inequality in the Americas)	4
PHIL 430	Ethics and Society	4
PHIL 436	Social and Political Philosophy	4
PHIL 450	Environmental Ethics	4
PHIL 510	Philosophy and Feminism	4
POLT 548	Drug Wars	4
POLT 762	International Political Economy	4
Courses in the College of Health and Human Services		
HDFS 746	Human Sexuality	4
NURS 450	Making Babies: Technology, Nature, and Social Context	4
OT 513	Stressed Out: The Science and Nature of Human Stress	4
SW 697	Special Topics in Social Welfare (Exploring Social Justice & Cultural Competency)	4
SW 715	Affirming Practice with Lesbian, Gay, Bisexual, Transgender, Queer+ People	4

The women's and gender studies core faculty will consider approving other courses that include more than 50% of content related to social justice leadership.

Women's and Gender Studies Minor

https://www.unh.edu/program/minor/womens-gender-studies

Description

Women's and gender studies provides students with an understanding of the status of women in various cultures and historical eras, in the nexus of race, class, sexuality, religious and disability studies. Students learn the use of gender as a category of analysis and increase their knowledge of women's contributions to many fields. Women's studies courses offer students critical perspectives on such basic questions of the social order as assumptions about gender roles and gender identity.

As a relatively small department in the College of Liberal Arts, we provide students with a sense of community and opportunities to contribute directly to changing the campus climate. In a rigorous academic environment, women's and gender studies offers students a springboard for activism. Our internship program enables students to gain first-hand work experience across many fields.

A major or minor in women's and gender studies prepares students for careers where the changing roles of women are having a perceptible impact. Alumni go on to law school and graduate school in a variety of disciplines. Some have taken positions with social change or family service agencies, while others have found work in such fields as health care, journalism, education, human rights, social and environmental justice, and the arts.

Requirements

Academic policies related to Minors.

Minor Requirements

- The Women's and Gender Studies (WGS) minor requires students to complete 20 credits of WGS-approved coursework with grades of C- or better.
- Courses taken pass/fail may not be used toward the minor.
- Students may double count no more than two (2) courses between the WGS minor and a major.

Code	Title	Credits
Required Courses		
WGS 401W	Introduction to Women's Studies	4
or WGS 405	Gender, Power and Privilege	
WGS 798W	Colloquium (normally taken at the end of the course sequence)	4
Electives		
Select three (3) WGS-approved elective courses from the list below.		12
Total Credits		**20**

WGS-Approved Electives

Code	Title	Credits
WGS Courses		
WGS 444A	Race Matters	4
WGS 505	Survey in Women's Studies	4
WGS 510	Framing Feminism: Gender Politics in Film	4
WGS 632W	Feminist Thought	4
WGS 795	Independent Study	1-4
WGS 796	Advanced Topics	4
WGS 797	Internship	4
WGS 798W	Colloquium	4
Additional courses approved for the WGS minor		
ANTH 525	Anthropology of the Body: Fat, Fitness and Form	4
ANTH 625	Sexuality in Cross-Cultural Perspective	4
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa	4
CLAS 550A	Identities and Difference in the Ancient World: Greek and Roman Women	4
CMN 567	Gender, Race, and Class in the Media	4
CMN 614	Gender, Race and Technology	4
CMN 685	Gendered Rhetorics	4
ENGL 575	Sex and Sensibility: The Rise of Chick Lit	4
ENGL 585	Introduction to Women in Literature	4
ENGL 728	Language and Gender	4
ENGL 778	Race and Gender in Film and Popular Culture	4
HIST 565	Women in Modern Europe	4
HIST 665	Themes in Women's History	4
INCO 505A	Becoming a Problem Solver	4
INCO 505I	Internship: Semester in the City (Boston) or Semester for Impact (NH)	8
INCO 682A	The Washington Center Career Readiness Seminar	4
INCO 682I	Washington DC Internship	4 or 8
ITAL 444B	Mamma Mia! Italian Motherhood from the Virgin Mary to Carmela Soprano	4
JUST 410	Sexual Harassment and Rape Prevention (SHARPP) Peer Advocacy	2-4
JUST 520	Girls Gone Bad: Delinquent Girls in Cultural Context	4
NURS 450	Making Babies: Technology, Nature, and Social Context	4
NURS 621	Maternal and Newborn Nursing	2
NURS 621C	Maternal Newborn Nurs Clin	2
PHIL 419	Race, Gender and Social Justice	4
PHIL 510	Philosophy and Feminism	4
POLT 511	Women & Politics	4
POLT 721	Feminist Political Theory	4
SOC 570	Sexual Behavior	4
SW 715	Affirming Practice with Lesbian, Gay, Bisexual, Transgender, Queer+ People	4

Additional approved elective courses are listed on the department website *for reference.*

World Languages

- World Languages Dual Major (p. 373)

World Languages Dual Major

https://www.unh.edu/program/dual-major/world-languages

Description

The world languages dual major program must be paired with majors that lead to a B.S. degree. Students focusing on Arabic or Chinese may pair the dual major with a major that leads to either a B.A. or a B.S. degree. The major offers eight language options from which to choose as a focus: Arabic, Chinese, classics, French, German, Italian, Russian and Spanish. Study of a second language adds immense value to a student's academic experience by sharpening skills in communication, decision-making, critical thinking, listening, concentration and multitasking. It also provides excellent professional preparation for careers in business, healthcare, science, engineering and more. Mastering a second language and honing intercultural communication skills in a multicultural America and globalized world will add richness and flexibility to life beyond one's career, as well.

The world languages dual major is administered by the Department of Languages, Literatures and Cultures (LLC) but draws on languages and courses from both LLC and the Department of Classics, Humanities and Italian Studies.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Declared Primary Major

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

World Languages Dual Major Requirements

The dual major in world languages consists of a total of 8 classes (32 credits), which may include the following, depending on your level/proficiency and language placement entering UNH. The minimum level of proficiency is noted below for each language.

All coursework required for the world languages major must be completed with a grade of C or better.

Code	Title	Credits
Language [1]		
Choose ONE target language from below:		8-24
Arabic Language		
Required courses:		
ARBC 401	Elementary Arabic I	
ARBC 402	Elementary Arabic II	
ARBC 503	Intermediate Arabic	
ARBC 504	Intermediate Arabic	
ARBC 631	Advanced Arabic I	
ARBC 632	Advanced Arabic II (minimum level of proficiency required)	
Chinese Language		
Required courses:		
CHIN 401	Elementary Chinese I	
CHIN 402	Elementary Chinese II	
CHIN 503	Intermediate Chinese I	
CHIN 504	Intermediate Chinese II	
CHIN 631	Advanced Chinese Conversation and Composition I	
CHIN 632	Advanced Chinese Conversation and Composition II (minimum level of proficiency required)	
Classics Language		
Required courses:		
LATN 401	Elementary Latin I	
or GREK 401	Elementary Classical Greek I	
LATN 402	Elementary Latin II	
or GREK 402	Elementary Classical Greek II	
LATN 503	Intermediate Latin I	
or GREK 503	Intermediate Classical Greek I	
LATN 504	Intermediate Latin II (minimum level of proficiency required for LATN or GREK)	
or GREK 504	Intermediate Classical Greek II	
French Language		
Required courses:		
FREN 401	Elementary French I	
FREN 402	Elementary French II	
FREN 503	Intermediate French I	
FREN 504	Intermediate French II	
FREN 631	Advanced French: Reading and Writing	
FREN 632	Advanced French: Listening and Speaking (minimum level of proficiency required)	
German Language		
Required courses:		
GERM 401	Elementary German I	
GERM 402	Elementary German II	
GERM 503	Intermediate German I	
GERM 504	Intermediate German II	
GERM 631W	Advanced Communications Skills I	
GERM 632	Advanced Communications Skills II (minimum level of proficiency required)	
Italian Language		
Required courses:		
ITAL 401	Elementary Italian I	
ITAL 402	Elementary Italian II	
ITAL 503	Intermediate Italian I	
ITAL 504	Intermediate Italian II	
ITAL 631	Advanced Conversation and Composition I	
ITAL 632	Advanced Conversation and Composition II (minimum level of proficiency required)	
Russian Language		
Required courses:		
RUSS 401	Elementary Russian I	
RUSS 402	Elementary Russian II	
RUSS 503	Intermediate Russian I	
RUSS 504	Intermediate Russian II	
RUSS 631	Advanced Russian Conversation and Composition	
RUSS 632	Advanced Russian Conversation and Composition (minimum level of proficiency required)	
Spanish Language		
Required courses:		
SPAN 401	Elementary Spanish I	
SPAN 402	Elementary Spanish II	
SPAN 503	Intermediate Spanish I	
SPAN 504	Intermediate Spanish II	
SPAN 631	Advanced Conversation and Composition I	
SPAN 632	Advanced Conversation and Composition II (minimum level of proficiency required)	
Culture, Linguistics, Literature [2]		
Choose any 400-, 500-, 600- or 700-level courses in your target language program and/or in LLC from the lists below		4-20
Arabic:		
ARBC 425, ARBC 595, ARBC 700, ARBC 795		
Chinese:		
CHIN 425, CHIN 521, CHIN 795		

Classics:		
CLAS 400, CLAS 401, CLAS 403, CLAS 404, CLAS 411, CLAS 412, CLAS 444, CLAS 444D, CLAS 501, CLAS 510, CLAS 511, CLAS 520A, CLAS 520B, CLAS 520C, CLAS 520D, CLAS 525, CLAS 530A, CLAS 530B, CLAS 540A, CLAS 540B, CLAS 540C, CLAS 550A, CLAS 550B, CLAS 550C, CLAS 551, CLAS 575, CLAS 601, CLAS 675, CLAS 676, CLAS 677, CLAS 678, CLAS 686, CLAS 694, CLAS 695, CLAS 696, LATN 605, LATN 606, LATN 753, LATN 754, LATN 756, GREK 595, GREK 751, GREK 753, GREK 795		
French:		
FREN 403, FREN 525, FREN 595, FREN 651, FREN 652, FREN 676, FREN 683, FREN 690, FREN 691, FREN 765, FREN 775, FREN 795		
German:		
GERM 521, GERM 525, GERM 586, GERM 728, GERM 732, GERM 738, GERM 797, GERM 798		
Italian:		
ITAL 425, ITAL 444A, ITAL 444B, ITAL 444C, ITAL 510J, ITAL 521, ITAL 522, ITAL 525, ITAL 526, ITAL 540, ITAL 595, ITAL 635, ITAL 651, ITAL 652, ITAL 675, ITAL 681A, ITAL 681B, ITAL 682B, ITAL 683, ITAL 733, ITAL 775, ITAL 795		
Russian:		
RUSS 521W, RUSS 525, RUSS 691W, RUSS 733, RUSS 790W, RUSS 795, RUSS 797		
Spanish:		
SPAN 403, SPAN 525, SPAN 526, SPAN 595, SPAN 641, SPAN 645, SPAN 647, SPAN 648, SPAN 650, SPAN 651, SPAN 652, SPAN 654, SPAN 683, SPAN 686, SPAN 790, SPAN 795, SPAN 797, SPAN 798, SPAN 799		
LLC:		
LLC 444H, LLC 444I, LLC 535A, LLC 540, LLC 552, LLC 555, LLC 560, LLC 595, LLC 791		
Capstone		
LLC 790	World Languages Capstone [3]	4

1 From 8 to 24 credits, depending on students' proficiency level and language placement on entry. All students must complete at least 8 classes (32 credits). While the major may start counting as early as the Elementary I level (401), those who enter the major at a higher level (e.g., 503, 504, or 631) will replace the lower level language courses with additional electives in the "Culture, Linguistics, Literature" category.

2 Minimum 4 credits up to 20 credits (depending on number required to get to 32 total)

3 Or approved equivalent 700-level course taken at UNH, approved study abroad equivalent, or approved high-impact experience (such as internship with a robust target language/culture component).

An experience such as study abroad, service learning, internship, or faculty-mentored, independent undergraduate research is encouraged but not required. Up to 16 credits toward the major may be earned in a semester-long study abroad program or summer study abroad program, depending on the individual language programs and their study abroad options. Students should consult with a faculty advisor regarding study abroad credits.

Student Learning Outcomes

Program Learning Outcomes

Linguistic Proficiency

- Students will demonstrate an Intermediate-Mid to Intermediate-High level of proficiency based on the ACTFL Perfomance Descriptors for Language Learners in the target language in three modes of communication: interpretive, interpersonal and presentational skills.
- Interpretive: Students are able to understand main ideas and some supporting details on familiar topics relevant to their immediate environment such as everyday life and particular interests. They have sufficient control of language (vocabulary, structure and conventional spoken and written language) to understand fully non-complex texts.
- Interpersonal: Students are able to participate in conversations on familiar topics, ask questions to initiate and sustain conversations, and communicate about self, others and everyday life.
- Presentational: Students are able to communicate information and express their thoughts about familiar topics using simple sentence structures. They are able to create messages in contexts relevant to themselves and others, and their immediate environment.

Intercultural and Transcultural Competence

- Students will demonstrate knowledge and understanding of other cultures. They are able to think critically about and are able to recognize and accept culturally differences, and the uniqueness of other cultures and peoples. By the time they graduate from our program, they will be able to:
- Recognize and describe the target culture products and practices they have directly studied and interpret texts that are read, heard and viewed.
- Analyze and critique the cultural and social products of the target culture (film, literature, art, popular culture, media, etc.) within their context, including conducting basic research projects.
- Begin to question the validity of their own cultural beliefs, behaviors and norms, by contrasting and comparing them with those of the target culture, and reflecting upon cultural differences related to spoken and written communication.

College of Life Sciences and Agriculture

Anthony S. Davis, Dean
Kimberly J. Babbitt, Associate Dean
Anton Bekkerman, Associate Dean
Jesse Stabile Morrell, Assistant Dean

The College of Life Sciences and Agriculture (COLSA) provides students a fundamental education in the agricultural, biological, life, natural, and social sciences. Advanced technical and professional courses are offered to prepare students for graduate school or entry-level positions in their chosen field. Preparation can vary from fundamental studies of cancer cells to community service planning, resource protection to genetic engineering, and molecular biology to biotechnology.

A blend of Discovery and foundational science courses, careful selection of supportive upper level courses, and ample opportunities to engage in internships, research, and study abroad experiences ensures graduates develop the background and experiences necessary to be competitive in the job market. Potential employers include federal, state, and local governments, consulting firms and industrial organizations. Graduates are employed as watershed, soil, and natural resource managers, associates in biomedical and agricultural research laboratories, marketing analysts and extension specialists, nutrition supervisors and environmental regulators, and information educators and communication experts. Community governments employ graduates as service planners and land-use specialists, teachers in traditional education, public health technicians, and urban pest control specialists. Positions are available in private and commercial organizations in production agriculture, food processing, landscaping, agribusiness, sales, and private planning. Graduates may also pursue entrepreneurial careers.

Additionally, COLSA prepares students for advanced study in their chosen field of interest where graduate study is required for attaining their career goals.

Degrees

The college offers three undergraduate degrees: the bachelor of arts, the bachelor of science, and the bachelor of science in forestry. Some of the courses prescribed in these degree programs partially fulfill the University's Discovery requirements. Students should see their advisers for specific information.

General Science Certification

Students majoring in biochemistry, molecular and cellular biology, biomedical science, biology, environmental conservation and sustainability, environmental sciences, forestry, wildlife and conservation biology, or zoology may seek certification to teach science at the middle, junior, or high school level.

For further information, contact the coordinator of teacher education in the Department of Education.

Academic Advising

All students are provided both faculty and professional advising. Additional advising is provided to students pursuing a pre-professional health or veterinary track.

Undeclared Status

Students may select a major upon entering the college or wait until registration for the sophomore year. Students who are uncertain about choosing a specific major may remain undeclared during their freshman year. In most cases, they will take the following courses, after which they should be ready to declare a major.

Course	Title	Credits
Fall		
LSA 400	Freshman Academic Experience I	1
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 403	General Chemistry I	4
Discovery Program requirement		4
Discovery Program Requirement or an introductory course in any department in the college		4
	Credits	**17**
Spring		
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 404	General Chemistry II	4
MATH 424B	Calculus for Life Sciences	4
Discovery Program requirement		4
	Credits	**16**
	Total Credits	**33**

Undeclared freshmen should explore possible majors by taking courses in the areas or programs that interest them most. They should talk to faculty, students, and their adviser concerning requirements, job opportunities, etc. in the various programs and should be prepared to declare a major when they register for the first semester of the sophomore year.

Bachelor of Arts

The bachelor of arts degree is available in Agriculture and Food Systems, and Zoology. Students must accumulate 128 credits, attain a 2.0 cumulative grade-point average, satisfy Discovery requirements, and complete a foreign language requirement (see University Academic Requirements for specific B.A. language requirements). Check individual departmental listings for specific major requirements and minimum acceptable grades in major courses.

Bachelor of Science

The bachelor of science degree is available in all departments or programs. University requirements are the same as for the bachelor of arts degree, except that a foreign language is not required and minimum acceptable grades may differ in some programs. Check individual departmental or program listings for specific major requirements.

https://colsa.unh.edu/

Departments

- Agriculture, Nutrition, and Food Systems (ANFS)
- Biological Sciences (DBS)
- Molecular, Cellular, and Biomedical Sciences (MCBS)
- Natural Resources and the Environment (NREN)

Programs of Study

- Acoustics (p. 376)
- Agribusiness (p. 377)
- Agriculture and Food Systems (AGFS) (p. 377)
- Animal Science (ANSC) (p. 382)
- Biochemistry, Molecular and Cellular Biology (BMCB) (p. 391)
- Biology (p. 395)
- Biomedical Science (BMS) (p. 399)
- Community and Environmental Planning (CEP) (p. 403)
- Diagnostic Science (p. 407)
- Ecogastronomy (p. 410)
- Environmental and Resource Economics (EREC) (p. 411)
- Environmental Conservation and Sustainability (p. 412)
- Environmental Sciences (p. 415)
- Forestry (p. 421)
- Genetics (GEN) (p. 424)
- GeoSpatial Analysis (p. 431)
- Green Real Estate (p. 431)
- Marine, Estuarine, and Freshwater Biology (MEFB) (p. 432)
- Microbiology (p. 436)
- Neuroscience and Behavior (NSB) (p. 437)
- Nutrition (NUTR) (p. 440)
- Sustainable Energy (p. 448)
- Sustainability Dual Major (p. 449)
- Wildlife and Conservation Biology (p. 451)
- Zoology (ZOOL) (p. 453)

Applications of Acoustics

- Applications of Acoustics Minor (p. 376)

Applications of Acoustics Minor

https://www.unh.edu/program/minor/applications-acoustics

Description

Acoustics is the branch of physics concerned with the properties of sound. Sound is a sensory mode that shapes our everyday lives. It provides a sense of geographical, perceptual and emotional sense of place. The science of acoustics spreads across many facets of human society—music, medicine, architecture, industrial production, warfare and environment. Applied uses of acoustics are playing an important role in addressing many of the societal challenges our nation faces. Acoustics has proven to be a valuable tool for monitoring and assessing impacts related to national security concerns, food security, energy, environment, and health. Acoustics is the only practical underwater sensing modality, and on land and in air, has become directly linked to a variety of applications in environmental acoustics. The Applications of Acoustics Minor will provide a recognized mastery of fundamental acoustics concepts to enhance traditional degrees that employers are looking for in this growing field of applied acoustics.

Requirements

Academic policies related to Minors.

- A minor in Applications of Acoustics is designed to provide a flexible and broad selection of courses to complement any other major area of study.
- A minimum of five 3-4 credit courses (minimum 18 credits) is required to complete the minor.
- A minimum grade of C- is required for all minor courses.

Code	Title	Credits
Required Courses		
Knowledge Tier		
Select one course from the following:		4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	
ECE 401	Perspectives in Electrical and Computer Engineering	
LING 405	Introduction to Linguistics	
NR 433	Wildlife Ecology	
OE 490	Introduction to Ocean Engineering	
PHYS 408	General Physics II	
Quantitative Tier		
Select one course from the following:		4
BIOL 633	Data Analysis for Life Science	
BIOL 706	Data Science with R for the Life Sciences	
CS 419	Computer Science for Engineers and Scientists	
IAM 550	Introduction to Engineering Computing	
MEFB 633	Quantitative Reasoning and Analysis for Marine Sciences	
NR 713	Quantitative Ecology	
RMP 724	Research, Evaluation, and Data-Driven Decisions	
Electives Tier		
Select three courses from the following:		10-12
COMM 504	Basic Audiology	
COMM 521	Anatomy and Physiology of the Speech and Hearing Mechanisms	
COMM 524	Clinical Phonetics	
COMM 636	Speech and Hearing Science	
ECE 714	Introduction to Digital Signal Processing	
MEFB 545	Field Bioacoustics and Soundscape Ecology	
MUSI 471	Theory I	
or MUSI 472	Theory I	
MUSI 571	Theory II	
or MUSI 572	Theory II	
NSB 727	Animal Communication	
OE 765	Underwater Acoustics	
OE 774	Integrated Seabed Mapping Systems	
OE 795	Special Topics (Acoustic Essentials)	
ZOOL 740	Acoustic Ecology	
Up to 4 credits of Independent Study (795) for acoustic-related work, requires pre-approval from minor coordinator		
Total Credits		**18-20**

Student Learning Outcomes

Program Learning Outcomes

- Students apply quantitative skills to acoustic problems within their discipline.
- Students demonstrate that they understand fundamental acoustics concepts, including sound measurement, sound propagation, and sound perception, and apply this knowledge to the diverse applications of acoustics.
- Students apply acoustic principles in their respective fields to address discipline-specific, real-word challenges involving sound,

noise, and vibration, facilitating problem-solving across multiple disciplines.
- Students develop the ability to communicate acoustics concepts effectively across interdisciplinary groups and to diverse audiences.

Agribusiness

Programs

- Agribusiness Minor (p. 377)

Agribusiness Minor

https://www.unh.edu/program/minor/agribusiness

Description

The agribusiness minor is designed to provide students outside environmental and resource economics with training in the management of agricultural and natural resource business firms. The program prepares students for careers in private companies, governmental agencies, and nonprofit organizations. Students interested in operating their own businesses will also find this minor valuable. Courses in the agribusiness minor emphasize the applied use of economic and business management principles in real-world decision-making contexts.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
ACC 501	Survey of Accounting	4
or ADMN 502	Financial Accounting	
ANSC 548	Agricultural Business Management	4
MKTG 530	Survey of Marketing	4
NR 411	Environmental and Resource Economics Perspectives (or equivalent) [1]	4
Elective Courses		
Select one course from the following:		4
AGFS 690	Agricultural and Food Policy	
AGFS 679	Food Production Field Experience I	
AGFS 680	Food Production Field Experience II	
CEP 672	Fundamentals of Real Estate	
CEP 673	Green Real Estate	
NR 572	Introduction to Natural Resource Economics	
NR 643	Economics of Forestry	
Total Credits		**20**

[1] NR 411 cannot be taken for credit if credit has been earned for ECON 402.

Agriculture and Food Systems (AGFS)

The Agriculture and Food Systems (AGFS) program offers a highly flexible curriculum to students interested in cultivating expertise in a wide variety of topics including modern agricultural practices, the science and management of working landscapes, local and regional food systems, value-added agricultural products, and the promotion of healthy eating through sustainable food production and policies.

Our graduates are prepared to pursue careers in a diverse range of fields including the production of food, fiber, and agricultural services; management and marketing of agricultural operations; management of working lands, landscapes, and ecosystems; agriculture/food/nutrition/natural resources-related research; community development; policy-making; regulatory work; and other current and emerging professions.

The program offers both a Bachelor of Science (B.S.) degree and a Bachelor of Arts (B.A.) degree. The B.S. degree best serves those seeking a strong foundation in scientific and technical knowledge and/or who envision pursuing an advanced degree in the agricultural sciences. The B.A. degree offers more flexibility to take courses from a variety of disciplines outside the biological sciences. Both degrees are flexibly designed to enable students to pursue a minor, dual degree, and/or second major.

https://colsa.unh.edu/agriculture-nutrition-food-systems

Programs

- Agriculture and Food Systems Major (B.A.) (p. 377)
- Agriculture and Food Systems Major (B.S.) (p. 379)
- Agriculture and Food Systems Minor (p. 381)
- Horticulture Minor (p. 381)

Faculty

Agriculture, Nutrition and Food Systems Department Faculty

Agriculture and Food Systems Major (B.A.)

https://www.unh.edu/program/bachelor-arts/agriculture-food-systems

Description

The Agriculture and Food Systems B.A. offers a highly flexible curriculum to students interested in cultivating expertise in a wide variety of topics including modern agricultural practices, the science and management of working landscapes, local and regional food systems, value-added agricultural products, and the promotion of healthy eating through sustainable food production and policies. An interdisciplinary field comprising the social, physical, and life sciences and beyond, agriculture and food systems lie at the center of many of the major challenges facing the world, such as producing food to meet the needs of an ever-growing population while conserving natural resources and promoting human wellness.

Our students get hands-on experience in applied coursework and are actively encouraged to conduct impactful research alongside faculty. Our graduates become practitioners and entrepreneurs of agricultural and food businesses, researchers and policy-makers at state/federal agencies and non-profit organizations, laboratory technicians, and agricultural educators. Some go on to obtain advanced degrees in the agricultural sciences.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The AGFS B.A. program structure includes FOUR major components: foundation courses, courses in a student-designed emphasis area, program elective courses, and a capstone. You must earn a minimum grade of C- in all courses required for the major.

Foundation courses include 37 credits, which satisfy at least 5 of the University Discovery requirements.

Student-Designed Emphasis courses include 20 credits that make up a cohesive emphasis or focus area. Courses may be selected from the *List of Approved Program Electives*, but do not need to be on that list. Each student will define their emphasis area in consultation with their advisor and submit it to the AGFS program committee for approval prior to the start of their 7th semester.

Elective courses include 16 credits, chosen from the *List of Approved Program Elective* courses.

A **Capstone** experience must take place during the senior year. There are two capstone course options below. The capstone *MAY NOT* be counted towards elective or emphasis credits.

Of the Student-Designed Emphasis and Program Elective courses, at least 16 credits (not counting the capstone) must be earned at the 600/700-level.

Code	Title	Credits
Foundation Courses (B.A.)		
AGFS 421	Introductory Horticulture	4
AGFS 405	Sustainable Agriculture and Food Production	4
AGFS 502	Agroecology	4
AGFS 602	Emphasis Development and Professional Pathways in Sustainable Agriculture and Food Systems	1
AGFS 620	Food Systems & Community Resilience	4
AGFS 690	Agricultural and Food Policy	4
or NR 411	Environmental and Resource Economics Perspectives	
or ECON 402	Principles of Economics (Micro)	
ANSC 421	Introduction to Animal Science	4
BIOL 528	Applied Biostatistics I	4
CHEM 411	Introductory Chemistry for Life Sciences [1]	4
or CHEM 403	General Chemistry I	
NR 501	Studio Soils	4
Student-Designed Emphasis Area		
At least 20 credits, proposed using the emphasis area declaration form (see your advisor) at least 1 year prior to planned graduation date.		20
Electives		
Select 16 credits from the approved electives list below.		16
Capstone		
AGFS 733W	Advanced Topics in Agriculture and Food Systems	4
or ANSC 750	Collaborative Farm Design and Development	

[1] Some courses (e.g. genetics, microbiology) require CHEM 403 and CHEM 404 as a prerequisite. If you intend to take these courses, you should take CHEM 403 rather than CHEM 411.

Code	Title	Credits
Approved Electives		
AAS 421	Large Animal Behavior and Handling Techniques	2
AAS 423	Dairy Selection	2
AAS 432	Introduction to Forage and Grassland Management	3
AAS 434	Equipment and Facilities Management	3
AAS 439	Fundamentals of Animal Health	2
AGFS 410	A Taste of the Tropics	4
AGFS 415	The Science of Fermentation: A Culinary Journey from Bread to Beer	4
AGFS 515	Technical Brewing	4
AGFS 601	Fruit Crop Production	4
AGFS 632	Urban Agriculture	4
AGFS 651	Plant Pathology	4
AGFS 670	Systems Thinking: Land Use Capability and Sustainability in Aotearoa New Zealand	4
AGFS 671	Agroecology and Sustainable Land Management in Aotearoa New Zealand	4
AGFS 672	Pathways to Sustainable Agriculture and Food Systems in Aotearoa New Zealand	4
AGFS 673	Agricultural Production and Business Practice in Aotearoa New Zealand	4
AGFS 679	Food Production Field Experience I	4
AGFS 680	Food Production Field Experience II	4
AGFS 689W	Greenhouse Management and Operation	4
AGFS 690	Agricultural and Food Policy	4
AGFS 733W	Advanced Topics in Agriculture and Food Systems	4
AGFS 750	Food System Solutions; Increasing Sustainability and Equity	4
AGFS 760W	Integrated Pest Management	4
AGFS 795	Investigations	1
AGFS 799H	Honors Senior Thesis	1
ANSC 425	Introduction to Dairy Herd Management	4
ANSC 548	Agricultural Business Management	4
ANSC 600	Field Experience	1-4
ANSC 602	Animal Rights and Societal Issues	4
ANSC 603	Introduction to Livestock Management	4
ANSC 605	Poultry Production and Health Management	4
ANSC 609	Principles of Animal Nutrition	4
ANSC 612	Genetics of Animals	4
ANSC 625	Animal Diseases	4
ANSC 650	Dairy Industry Travel Course	1
ANSC 690	Livestock and Wildlife in Namibia: Challenges, Opportunities and Geography	4
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM)	4
ANSC 701	Physiology of Reproduction	4
ANSC 710	Dairy Nutrition	4
ANSC 715	Physiology of Lactation	4
ANSC 724	Reproductive Management and Artificial Insemination	4
ANSC 727	Advanced Dairy Management I	4
ANSC 728	Advanced Dairy Management II	4
ANSC 750	Collaborative Farm Design and Development	4
ANSC 795	Investigations	1-4
BIOL 409	Green Life: Introducing the Botanical Sciences	4
BIOL 510	Mushrooms, Molds, and Mildews: Introduction to the Fungal Kingdom	4
BIOL 541W	Ecology	4
BIOL 566	Systematic Botany	4
BIOL 704	Plant-Microbe Interactions	3
BIOL 720	Plant-Animal Interactions	4
BIOL 752	New England Mushrooms: a Field and Lab Exploration	4
BMS 503	General Microbiology	3
BMS 504	General Microbiology Laboratory	2
CEP 415	Community Development Perspectives	4
CHBE 410	Energy and Environment	4
ECOG 401	Introduction to Ecogastronomy	4
GEN 604	Principles of Genetics	4

GEN 772	Evolutionary Genetics of Plants	4
GEOG 670	Climate and Society	4
HMGT 570	International Food and Culture	4
MGT 520	Topics in Management	4
MKTG 530	Survey of Marketing	4
NR 425	Field Dendrology	4
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
NR 504	Freshwater Resources	4
NR 506	Forest Entomology	4
NR 527	Forest Ecology	4
NR 579	Wildland Fire Ecology and Management	4
NR 602	Natural Resources and Environmental Policy	4
NR 643	Economics of Forestry	4
NR 650	Principles of Conservation Biology	4
NR 706	Soil Ecology	4
NR 729	Silviculture	4
NR 749	Forest Inventory and Modeling	4
NR 760	Geographic Information Systems in Natural Resources	4
NR 761	Environmental Soil Chemistry	4
NR 782	Forest Health in a Changing World	4
NR 785	Systems Thinking for Sustainable Solutions	4
NUTR 400	Nutrition in Health and Well Being	4
NUTR 405	Food and Society	4
NUTR 550	Food Science: Principle and Practice	4
NUTR 720	Community Nutrition	4
NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	4
NUTR 795	Investigations	1-4
RMP 724	Research, Evaluation, and Data-Driven Decisions	4
MEFB 772	Fisheries Biology: Conservation and Management	4
ZOOL 555	Introduction to Entomology	4
ZOOL 610	Principles of Aquaculture	4

University Requirements

In addition to meeting the AGFS major requirements, students must satisfy all University requirements including those that pertain to the minimum number of credits, grade-point average, writing-intensive courses, the Discovery Program, and foreign language for B.A. students only.

Student Learning Outcomes

Program Learning Outcomes

- Students will demonstrate a working understanding of the interdisciplinary nature of agriculture and food systems and the basic principles underpinning sustainability including: economic viability, environmental stewardship, social responsibility, and the trade-offs between competing metrics of sustainability.
- Students will demonstrate in-depth knowledge, critical thinking and analysis, and effective written communication in a self-declared area of emphasis within the program.
- Students will gain an applied understanding of agriculture and food systems by engaging in an experiential education opportunity.
- Students will be able to independently interpret, evaluate, and engage with research in the agricultural sciences, including its biological, physical, social, and/or economic aspects.

Agriculture and Food Systems Major (B.S.)

https://www.unh.edu/program/bachelor-science/agriculture-food-systems

Description

Building on a strong foundation in the biological sciences, the Agriculture and Food Systems B.S. offers a highly flexible curriculum to students interested in cultivating expertise in a wide variety of topics including modern agricultural practices, the science and management of working landscapes, local and regional food systems, value-added agricultural products, and the promotion of healthy eating through sustainable food production and policies. An interdisciplinary field comprising the social, physical, and life sciences and beyond, agriculture and food systems lie at the center of many of the major challenges facing the world, such as producing food to meet the needs of an ever-growing population while conserving natural resources and promoting human wellness.

Our students get hands-on experience in applied coursework and are actively encouraged to conduct impactful research alongside faculty. Our graduates become practitioners and entrepreneurs of agricultural and food businesses, researchers and policy-makers at state/federal agencies and non-profit organizations, laboratory technicians, and agricultural educators. Some go on to obtain advanced degrees in the agricultural sciences.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The AGFS B.S. program structure includes FOUR major components: foundation courses, courses in a student-designed emphasis area, program elective courses, and a capstone. Students must earn a minimum grade of C- in all courses required for the major.

Foundation courses include 49 credits, which satisfy at least 6 of the University Discovery requirements.

Student-Designed Emphasis courses include 20 credits that make up a cohesive emphasis or focus area. Courses may be selected from the *List of Approved Program Electives*, but do not need to be on that list. Each student will define their emphasis area in consultation with their advisor and submit it to the AGFS program committee for approval prior to the start of their 7th semester.

Elective courses include 16 credits, chosen from the *List of Approved Program Elective* courses.

A **Capstone** experience must take place during senior year. There are two capstone course options below. The capstone *MAY NOT* be counted towards elective or emphasis credits.

Of the Student-Designed Emphasis and Program Elective courses, at least 16 credits (not counting the capstone) must be earned at the 600/700-level.

Code	Title	Credits
Foundation Courses (B.S.)		
AGFS 405	Sustainable Agriculture and Food Production	4
AGFS 421	Introductory Horticulture	4
AGFS 502	Agroecology	4
AGFS 602	Emphasis Development and Professional Pathways in Sustainable Agriculture and Food Systems	1
AGFS 620	Food Systems & Community Resilience	4
ANSC 421	Introduction to Animal Science	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BIOL 528	Applied Biostatistics I	4
AGFS 690	Agricultural and Food Policy	4
or NR 411	Environmental and Resource Economics Perspectives	
or ECON 402	Principles of Economics (Micro)	
CHEM 403	General Chemistry I [1]	4
or CHEM 411	Introductory Chemistry for Life Sciences	
CHEM 404	General Chemistry II	4
or BMCB 501	Biological Chemistry	
or BIOL 541W	Ecology	
NR 501	Studio Soils	4
Student-Designed Emphasis Area		
At least 20 credits, proposed using the emphasis area declaration form (see your advisor) at least 2 semesters prior to planned graduation date.		20
Electives		
Select 16 credits from the approved electives list below.		16
Capstone		
AGFS 733W	Advanced Topics in Agriculture and Food Systems	4
or ANSC 750	Collaborative Farm Design and Development	
Total Credits		**89**

[1] Some courses (e.g. genetics, microbiology) require CHEM 403 General Chemistry I and CHEM 404 General Chemistry II as a prerequisite. If you intend to take these courses, you should take CHEM 403 General Chemistry I rather than CHEM 411 Introductory Chemistry for Life Sciences.

Code	Title	Credits
Approved Electives		
AAS 421	Large Animal Behavior and Handling Techniques	2
AAS 423	Dairy Selection	2
AAS 432	Introduction to Forage and Grassland Management	3
AAS 434	Equipment and Facilities Management	3
AAS 439	Fundamentals of Animal Health	2
AGFS 410	A Taste of the Tropics	4
AGFS 415	The Science of Fermentation: A Culinary Journey from Bread to Beer	4
AGFS 515	Technical Brewing	4
AGFS 601	Fruit Crop Production	4
AGFS 632	Urban Agriculture	4
AGFS 651	Plant Pathology	4
AGFS 670	Systems Thinking: Land Use Capability and Sustainability in Aotearoa New Zealand	4
AGFS 671	Agroecology and Sustainable Land Management in Aotearoa New Zealand	4
AGFS 672	Pathways to Sustainable Agriculture and Food Systems in Aotearoa New Zealand	4
AGFS 673	Agricultural Production and Business Practice in Aotearoa New Zealand	4
AGFS 679	Food Production Field Experience I	4
AGFS 680	Food Production Field Experience II	4
AGFS 689W	Greenhouse Management and Operation	4
AGFS 733W	Advanced Topics in Agriculture and Food Systems	4
AGFS 750	Food System Solutions; Increasing Sustainability and Equity	4
AGFS 760W	Integrated Pest Management	4
AGFS 795	Investigations	1
AGFS 795W	Investigations	1
ANSC 425	Introduction to Dairy Herd Management	4
ANSC 548	Agricultural Business Management	4
ANSC 600	Field Experience	1-4
ANSC 602	Animal Rights and Societal Issues	4
ANSC 603	Introduction to Livestock Management	4
ANSC 605	Poultry Production and Health Management	4
ANSC 609	Principles of Animal Nutrition	4
ANSC 612	Genetics of Animals	4
ANSC 625	Animal Diseases	4
ANSC 650	Dairy Industry Travel Course	1
ANSC 690	Livestock and Wildlife in Namibia: Challenges, Opportunities and Geography	4
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM)	4
ANSC 701	Physiology of Reproduction	4
ANSC 710	Dairy Nutrition	4
ANSC 715	Physiology of Lactation	4
ANSC 724	Reproductive Management and Artificial Insemination	4
ANSC 727	Advanced Dairy Management I	4
ANSC 728	Advanced Dairy Management II	4
ANSC 750	Collaborative Farm Design and Development	4
ANSC 795	Investigations	1-4
BIOL 409	Green Life: Introducing the Botanical Sciences	4
BIOL 510	Mushrooms, Molds, and Mildews: Introduction to the Fungal Kingdom	4
BIOL 541W	Ecology	4
BIOL 566	Systematic Botany	4
BIOL 704	Plant-Microbe Interactions	3
BIOL 720	Plant-Animal Interactions	4
BIOL 752	New England Mushrooms: a Field and Lab Exploration	4
BMS 503	General Microbiology	3
BMS 504	General Microbiology Laboratory	2
CEP 415	Community Development Perspectives	4
CHBE 410	Energy and Environment	4
ECOG 401	Introduction to Ecogastronomy	4
AGFS 690	Agricultural and Food Policy	4
NR 579	Wildland Fire Ecology and Management	4
GEN 604	Principles of Genetics	4
GEN 772	Evolutionary Genetics of Plants	4
GEOG 670	Climate and Society	4
HMGT 570	International Food and Culture	4
MGT 520	Topics in Management	4
MKTG 530	Survey of Marketing	4
NR 425	Field Dendrology	4
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
NR 504	Freshwater Resources	4
NR 506	Forest Entomology	4
NR 527	Forest Ecology	4
NR 602	Natural Resources and Environmental Policy	4
NR 643	Economics of Forestry	4
NR 650	Principles of Conservation Biology	4
NR 706	Soil Ecology	4
NR 729	Silviculture	4
NR 749	Forest Inventory and Modeling	4
NR 760	Geographic Information Systems in Natural Resources	4
NR 761	Environmental Soil Chemistry	4
NR 782	Forest Health in a Changing World	4
NR 785	Systems Thinking for Sustainable Solutions	4
NUTR 400	Nutrition in Health and Well Being	4
NUTR 405	Food and Society	4
NUTR 550	Food Science: Principle and Practice	4
NUTR 720	Community Nutrition	4
NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	4
NUTR 795	Investigations	1-4
RMP 724	Research, Evaluation, and Data-Driven Decisions	4
MEFB 772	Fisheries Biology: Conservation and Management	4
ZOOL 555	Introduction to Entomology	4
ZOOL 610	Principles of Aquaculture	4

University Requirements

In addition to meeting the AGFS major requirements, students must satisfy all University requirements including those that pertain to the minimum number of credits, grade-point average, writing-intensive courses, and the Discovery Program.

Student Learning Outcomes

Program Learning Outcomes

- Students will demonstrate a working understanding of the interdisciplinary nature of agriculture and food systems and the basic principles underpinning sustainability including: economic viability, environmental stewardship, social responsibility, and the trade-offs between competing metrics of sustainability.
- Students will demonstrate in-depth knowledge, critical thinking and analysis, and effective written communication in a self-declared area of emphasis within the program.
- Students will gain an applied understanding of agriculture and food systems by engaging in an experiential education opportunity.
- Students will be able to independently interpret, evaluate, and engage with research in the agricultural sciences, including its biological, physical, social, and/or economic aspects.

Agriculture and Food Systems Minor

https://www.unh.edu/program/minor/agriculture-food-systems

Description

Encompassing a broad mixture of the natural sciences, social sciences, and business skills, agriculture and food systems is an interdisciplinary field that lies at the center of many of the major challenges facing the world, such as producing food to meet the needs of an ever-growing population while conserving natural resources and promoting human wellness. An understanding of these challenges and potential solutions can enhance any career.

The required coursework for this minor provides an introduction to sustainable and organic agriculture practices, including an array of strategies to sustainably manage soil, nutrient, water, and genetic resources. Students gain more in-depth knowledge of agriculture and food systems by selecting from a diverse array of electives focused on production systems, management, and/or policy.

Undergraduates in any major field of study (except current majors) may minor in Agriculture and Food Systems.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
AGFS 405	Sustainable Agriculture and Food Production	4
Electives		
Select 16 credits from the following courses: [1]		16
AAS 432	Introduction to Forage and Grassland Management	
AGFS 403	Green Thumb Workshop	
AGFS 410	A Taste of the Tropics	
AGFS 421	Introductory Horticulture	
AGFS 502	Agroecology	
AGFS 601	Fruit Crop Production	
AGFS 620	Food Systems & Community Resilience	
AGFS 632	Urban Agriculture	
AGFS 651	Plant Pathology	
AGFS 670	Systems Thinking: Land Use Capability and Sustainability in Aotearoa New Zealand	
AGFS 671	Agroecology and Sustainable Land Management in Aotearoa New Zealand	
AGFS 672	Pathways to Sustainable Agriculture and Food Systems in Aotearoa New Zealand	
AGFS 673	Agricultural Production and Business Practice in Aotearoa New Zealand	
AGFS 679	Food Production Field Experience I	
AGFS 680	Food Production Field Experience II	
AGFS 689W	Greenhouse Management and Operation	
AGFS 690	Agricultural and Food Policy	
AGFS 733W	Advanced Topics in Agriculture and Food Systems	
AGFS 750	Food System Solutions; Increasing Sustainability and Equity	
AGFS 760W	Integrated Pest Management	
ANSC 421	Introduction to Animal Science	
ANSC 750	Collaborative Farm Design and Development	
NR 501	Studio Soils	
NUTR 405	Food and Society	
NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	
ZOOL 610	Principles of Aquaculture	
Total Credits		**20**

[1] Electives - 16 credits of elective coursework, 8 credits must be at the 600/700 level, selected from the courses listed.

Horticulture Minor

https://www.unh.edu/program/minor/horticulture

Description

Through completion of the horticulture minor, students gain practical, well-rounded knowledge of horticultural production systems. The required Introductory Horticulture course provides the necessary foundation in theoretical and applied knowledge in the plant sciences for the minor. Students then gain more in-depth knowledge by taking additional coursework focused on botany, various specific crop production systems, or integrated pest management strategies.

Our horticulture students study the science and art of cultivating plants and the many ways that plants enhance the human experience. The cultivation of fruits, vegetables, and ornamental plants is key to solving many of the major challenges facing the world, such as producing food to meet the needs of an ever-growing population while conserving natural resources and promoting human wellness. An understanding of these challenges and their potential solutions can enhance any career, and a minor in horticulture may complement any major field of study.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
AGFS 421	Introductory Horticulture	4
Electives		
Select 16 credits from the following courses:		16
AGFS 403	Green Thumb Workshop	
AGFS 405	Sustainable Agriculture and Food Production	
AGFS 410	A Taste of the Tropics	
AGFS 601	Fruit Crop Production	

AGFS 632	Urban Agriculture
AGFS 651	Plant Pathology
AGFS 679	Food Production Field Experience I
or AGFS 680	Food Production Field Experience II
AGFS 689W	Greenhouse Management and Operation
AGFS 760W	Integrated Pest Management
AGFS 795	Investigations (Horticulture related topics)
BIOL 409	Green Life: Introducing the Botanical Sciences
BIOL 566	Systematic Botany
BIOL 704	Plant-Microbe Interactions
Total Credits	**20**

Animal Science (ANSC)

The undergraduate program in animal science is designed to prepare students for a variety of careers by providing strong fundamental and applied education in animal nutrition, reproduction, genetics, physiology, health, and animal management. On-campus animal facilities available to provide practical experience with agricultural animals include the Fairchild Dairy Teaching and Research Center, the Lou and Lutza Smith Equine Center, the nearby organic dairy housed at the Burley-Demeritt Farm, two high tunnels for small livestock species, and a small animal veterinary clinic. Program graduates may be employed in animal business ownership, management, marketing, the pharmaceutical industry, agribusiness, finance, manufacturing, public relations, extension, vocational education, or consulting. Students who are considering continuing their studies through graduate school or veterinary school are advised to take the recommended additional courses in chemistry, math, and physics.

https://colsa.unh.edu/agriculture-nutrition-food-systems

Programs

- Animal Science Major (B.S.) (p. 382)
- Animal Science Major: Dairy Management Option (B.S.) (p. 385)
- Animal Science Major: Equine Studies Option (B.S.) (p. 387)
- Animal Science Minor (p. 390)
- Dairy Management Minor (p. 390)
- Equine Assisted Services (Minor) (p. 390)
- Equine Studies Minor (p. 391)

Faculty

Agriculture, Nutrition and Food Systems Department Faculty

Animal Science Major (B.S.)

https://www.unh.edu/program/bachelor-science/animal-science

Description

Animal science is the study of the biology and management of animals that enhance human life and well-being. Completion of the Animal Science B.S. is designed to prepare students for a variety of animal-focused careers. Students in our major can work with a wide variety of animal species as part of the curriculum, from dairy cattle to chickens to small animals. Our program allows students to gain a scientific understanding of animals while exploring the many career options in animal management.

The Animal Science B.S. is one of many pathways for admission to veterinary school. Because admission to veterinary school is highly competitive due to the limited number of available spaces and the high standards for admission, students are advised to choose an academic program that deeply interests them. Simply taking the prerequisite courses required by veterinary schools without considering alternate career goals is not advisable.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students will be required to earn a C- or better in all required courses for the animal science major to receive credit toward graduation. Students failing to do this will need to retake the course in order to receive credit.

Code	Title	Credits
Foundation Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BMCB 501	Biological Chemistry [1]	4
BIOL 528	Applied Biostatistics I	4
or HMP 540	Statistics for Health and Human Service Professionals	
or PSYC 402	Statistics in Psychology	
or SOC 402	Statistics	
Requirements for All Animal Science Majors		
ANSC 406	Careers in Animal Science	1
ANSC 511	Animal Anatomy and Physiology I	4
ANSC 512	Animal Anatomy and Physiology II	4
ANSC 543	Technical Writing in Animal Sciences (or equivalent) [2]	2
ANSC 602	Animal Rights and Societal Issues	4
ANSC 609	Principles of Animal Nutrition	4
ANSC 612	Genetics of Animals	4
ANSC 625	Animal Diseases	4
Introductory Course		
Select one of the following:		4
ANSC 421	Introduction to Animal Science (preferred)	
ANSC 427	Introduction to Equine Science	
ANSC 425	Introduction to Dairy Herd Management	
Reproduction Course		
Select one of the following:		4
ANSC 701	Physiology of Reproduction	
ANSC 715	Physiology of Lactation	
ANSC 724	Reproductive Management and Artificial Insemination	
BMS 702	Endocrinology	

Major Electives		
Select 3 electives from the following list. Electives less than 3 credits must be combined to equal 3 credits or more to count as 1 elective. At least 2 electives must be at the 500 level or above. At least 3 elective credits must be fulfilled with courses from the Experiential category.		12
AAS 421	Large Animal Behavior and Handling Techniques	
AAS 423	Dairy Selection	
AAS 432	Introduction to Forage and Grassland Management	
AAS 434	Equipment and Facilities Management	
AGFS 620	Food Systems & Community Resilience	
AGFS 690	Agricultural and Food Policy	
ADMN 502	Financial Accounting	
ANSC 425	Introduction to Dairy Herd Management	
ANSC 427	Introduction to Equine Science	
ANSC 515	Explorations in Veterinary Medicine	
ANSC 526	Equine Conformation, Movement, and Performance	
ANSC 536	Preparation and Competition Techniques for the Modern Sport Horse	
ANSC 548	Agricultural Business Management	
ANSC 600	Field Experience	
ANSC 603	Introduction to Livestock Management	
ANSC 605	Poultry Production and Health Management	
ANSC 627	Animal Health Applications	
ANSC 647	Equine Stable Management	
ANSC 650	Dairy Industry Travel Course	
ANSC 665	Agricultural & Equine Event Design, Planning and Management	
ANSC 670	Exotic Companion Species Health and Management	
ANSC 690	Livestock and Wildlife in Namibia: Challenges, Opportunities and Geography	
ANSC 695	Supervised Teaching Experience (Course can only be used once for elective credit)	
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM) (Each semester counts as 1 elective. However, if taken in the senior year >90 credits, 1 semester can count as the capstone and 1 as an elective.)	
ANSC 701	Physiology of Reproduction	
ANSC 710	Dairy Nutrition	
ANSC 715	Physiology of Lactation	
ANSC 724	Reproductive Management and Artificial Insemination	
ANSC 727	Advanced Dairy Management I	
ANSC 728	Advanced Dairy Management II	
ANSC 750	Collaborative Farm Design and Development	
ANSC 795	Investigations	
ANSC 799	Honors Senior Thesis	
BMCB 605	Principles of Cell Biology	
BMS 602	Pathogenic Microbiology	
BMS 623	Histology: Microscopic Cellular Structure and Function	
BMS 655	Human and Animal Parasites	
BMS 702	Endocrinology	
BMS 703	Infectious Disease and Health	
BMS 704	Pathologic Basis of Disease	
BMS 705	Immunology	
BMS 706	Virology	
BMS 718	Mammalian Physiology	
CMN 500	Public Speaking	
MEFB 773	Physiology of Fishes	
MGT 535	Organizational Behavior	
NR 411	Environmental and Resource Economics Perspectives	
VTEC 424	Introduction to Veterinary Technology	
ZOOL 610	Principles of Aquaculture	
ZOOL 613W	Animal Behavior	
ZOOL 777W	Neuroethology	
Experiential Electives		
A total of at least 3 elective credits must be fulfilled with courses in this category. ANSC 795 and 799 projects approved to meet this requirement should include a significant component of hands-on live animal experience		
AAS 421	Large Animal Behavior and Handling Techniques	
AAS 423	Dairy Selection	
ANSC 515	Explorations in Veterinary Medicine	
ANSC 526	Equine Conformation, Movement, and Performance	
ANSC 603	Introduction to Livestock Management	
ANSC 605	Poultry Production and Health Management	
ANSC 647	Equine Stable Management	
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM)	
ANSC 728	Advanced Dairy Management II	
ANSC 795	Investigations	
ANSC 799	Honors Senior Thesis	
Total Credits		**76**

1 Students interested in graduate school should take 2 semesters of Organic Chemistry (CHEM 651/CHEM 653 and CHEM 652/CHEM 654) and one semester of General Biochemistry (BMCB 658/BMCB 659) in place of BMCB 501.

2 ENGL 501 Introduction to Creative Nonfiction, ENGL 502 Professional and Technical Writing, ENGL 503 Persuasive Writing or ENGL 419 How to Read Anything

Capstone Experience

The capstone requirement must be completed during the senior year, and may be satisfied through completion of ANSC 698 Cooperative for Real Education in Agricultural Management (CREAM), ANSC 728 Advanced Dairy Management II, ANSC 750 Collaborative Farm Design and Development, or the ANSC 797 Equine Capstone Experience.
An ANSC 799 Honors Senior Thesis, which typically includes mentored research and some form of experiential learning, can also fulfill the capstone requirement.

Additional Information

Requirements for Students Interested in Graduate/ Veterinary School

- Students interested in veterinary medicine should consult the pre-veterinary medicine program website.

Code	Title	Credits
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
CHEM 651 & CHEM 653	Organic Chemistry I and Organic Chemistry Laboratory	5
CHEM 652 & CHEM 654	Organic Chemistry II and Organic Chemistry Laboratory	5
MATH 424B	Calculus for Life Sciences	4
PHYS 401	Introduction to Physics I	4
PHYS 402	Introduction to Physics II	4

2+2 Program Pathways and Course Articulations

Students in a 2+2 program pathway below can complete an associate degree and continue into the Bachelor of Science in Animal Science. In these programs, select courses completed as part of the associate degree are approved to satisfy equivalent course or elective requirements in the bachelor's degree program.

The following course equivalencies are approved for the below program pathways:

Code	Title	Credits
Applied Animal Science (A.A.S.) to Animal Science (B.S.)		
AAS 428 satisfies ANSC 512		
Veterinary Technology (A.A.S.) to Animal Science (B.S.)		
AAS 428 satisfies ANSC 512		
VTEC 424 satisfies ANSC 406		
VTEC 430 satisfies Major Elective		
VTEC 449 satisfies ANSC 421		
VTEC 550 satisfies Experiential Major Elective		

VTEC 565 satisfies ANSC 625

VTEC 575 satisfies Major Elective

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
Introductory course, ANSC 421 preferred		4
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing (WI) or Discovery course (Not SS, FPA, or WC)	4
	Credits	**16**
Spring		
ANSC 406	Careers in Animal Science	1
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 404	General Chemistry II	4
ENGL 401	First-Year Writing (or Discovery course)	4
Elective		4
	Credits	**17**
Second Year		
Fall		
ANSC 511	Animal Anatomy and Physiology I	4
ANSC 612	Genetics of Animals	4
Discovery course		4
Elective		4
	Credits	**16**
Spring		
ANSC 512	Animal Anatomy and Physiology II	4
ANSC 543	Technical Writing in Animal Sciences (WI)	2
BIOL 528	Applied Biostatistics I	4
Discovery Course		4
Elective		2
	Credits	**16**
Third Year		
Fall		
ANSC 625	Animal Diseases	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
Discovery course		4
Elective		4
	Credits	**17**
Spring		
ANSC 609	Principles of Animal Nutrition	4
BMCB 501	Biological Chemistry	4
Discovery course		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
ANSC Reproduction course or Discovery course		4
Elective		4
Elective		4
Elective		4
	Credits	**16**
Spring		
ANSC 602	Animal Rights and Societal Issues (WI)	4
ANSC Reproduction course or Discovery course		4
Capstone course		4
Elective		4
	Credits	**16**
	Total Credits	**130**

ANSC Sample Student Schedule by Semester - Pre-Veterinary/ Graduate School Intent

First Year		
Fall		**Credits**
Introductory course, ANSC 421 preferred		4
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing (WI) or Discovery course (Not SS, FPA, or WC)	4
	Credits	**16**
Spring		
ANSC 406	Careers in Animal Science	1
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 404	General Chemistry II	4
MATH 424B	Calculus for Life Sciences	4
ENGL 401	First-Year Writing (or Discovery course)	4
	Credits	**17**
Second Year		
Fall		
ANSC 511	Animal Anatomy and Physiology I	4
BIOL 528	Applied Biostatistics I	4
CHEM 651 & CHEM 653	Organic Chemistry I and Organic Chemistry Laboratory	5
Discovery course		4
	Credits	**17**
Spring		
ANSC 512	Animal Anatomy and Physiology II	4
CHEM 652 & CHEM 654	Organic Chemistry II and Organic Chemistry Laboratory	5
ENGL 501	Introduction to Creative Nonfiction (WI and FPA DISC)	4
Elective		4
	Credits	**17**

Third Year		
Fall		
ANSC 612	Genetics of Animals	4
ANSC 625	Animal Diseases	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
Discovery course or Elective		4
	Credits	**17**
Spring		
ANSC 609	Principles of Animal Nutrition	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
Discovery course		4
Elective		4
	Credits	**17**
Fourth Year		
Fall		
PHYS 401	Introduction to Physics I	4
ANSC Repro Course or Discovery course		4
Discovery course or Elective		4
Elective		4
	Credits	**16**
Spring		
ANSC 602	Animal Rights and Societal Issues (WI)	4
PHYS 402	Introduction to Physics II	4
ANSC Repro Course or Discovery course		4
Capstone		4
	Credits	**16**
	Total Credits	**133**

Student Learning Outcomes

Program Learning Outcomes

Students will gain a fundamental knowledge of the animal science related disciplines of:

Anatomy & Physiology
- Students will be able to recognize the complimentary relationship of anatomic structure and function and accurately describe the basic physiologic processes of mammalian organ systems.

Nutrition
- Students will be able to identify, compare, contrast, and link different concepts regarding animal feeding and metabolism of carbohydrates, lipids, and protein in major livestock species and equine.

Genetics
- Students will understand basic principles and applications of inheritance, the difference between qualitative and quantitative genetics, and be able to discuss the various disciplines within genetics.

Disease
- Students will understand the modes of transmission of infectious diseases, recognize signs of illness associated with notable diseases in livestock species, and be able to appropriately apply general concepts of disease prevention and biosecurity to a variety of management situations.

Reproduction
- Students will comprehend the mechanisms and endocrine control of gametogenesis, fertilization, pregnancy, and lactation and understand the variety of factors that can influence reproductive success.

Animal Ethics
- Students will recognize the numerous ways that humans use, benefit from, and conflict with non-human animals and have an awareness of the variety of motivations and influences that drive these relationships.

Critical Analysis & Communication
- Students will be able to develop critical questions that facilitate their independent investigation of topics related to animal science and demonstrate an integration of discipline specific knowledge through engaging in experiential education opportunities.
- Students will be able to conduct literature searches using relevant databases to critically evaluate both academic and popular press resources pertinent to the animal sciences.
- Students will be able to construct well-supported, effectively organized written arguments to express informed perspectives on animal science related topics. These writings will demonstrate professional style, appropriate mechanics (grammar, punctuation, and spelling), and the correct use of citations.

Animal Science Major: Dairy Management Option (B.S.)

https://www.unh.edu/program/bachelor-science/animal-science-dairy-management

Description

The Animal Science: Dairy Management option is designed to provide students with solid training in areas important to the successful management of a dairy enterprise, for employment in related agribusinesses (e.g., pharmaceutical and feed industries), or for those wishing to pursue additional training leading to the M.S. or Ph.D. degree in dairy science or its related disciplines. Dairy management students receive training in areas such as nutrition, reproduction, diseases, genetics, lactation physiology, forages, agribusiness finance, personnel management, computer science, and public relations. Students in the Dairy Management Option will be able to practice hands-on skills on our two modern dairy facilities; the on campus Fairchild Dairy Teaching and Research Center milking 100 Holstein cows and the Burley-DeMeritt Organic Dairy Research Farm in Lee milking 50 Jersey cows.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

GPA requirements for all students in Animal Science: Students will be required to earn a C- or better in the foundation courses and all required courses for the animal science major to receive credit toward graduation. Students failing to do this will need to retake the course in order to receive credit.

Code	Title	Credits
Foundation Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BMCB 501	Biological Chemistry	4-5
or BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	
BIOL 528	Applied Biostatistics I	4
or HMP 540	Statistics for Health and Human Service Professionals	
or PSYC 402	Statistics in Psychology	
or SOC 402	Statistics	
Requirements for All Animal Science Majors		
ANSC 406	Careers in Animal Science	1
ANSC 511	Animal Anatomy and Physiology I	4
ANSC 512	Animal Anatomy and Physiology II	4
ANSC 543	Technical Writing in Animal Sciences (or equivalent) [1]	2
ANSC 602	Animal Rights and Societal Issues	4
ANSC 609	Principles of Animal Nutrition	4
ANSC 612	Genetics of Animals	4
ANSC 625	Animal Diseases	4
Total Credits		**56-57**

[1] ENGL 501 Introduction to Creative Nonfiction, ENGL 502 Professional and Technical Writing, ENGL 503 Persuasive Writing, or ENGL 419 How to Read Anything.

Students are responsible for the completion of the animal science foundation courses and the requirements for all animal science majors (both lists of courses above).

Students interested in graduate school should take two semesters of Organic Chemistry and one semester of Biochemistry.

Code	Title	Credits
Dairy Management Option Requirements		
ANSC 425	Introduction to Dairy Herd Management (preferred)	4
or ANSC 421	Introduction to Animal Science	
AAS 423	Dairy Selection	2
AAS 432	Introduction to Forage and Grassland Management	3
ANSC 548	Agricultural Business Management	4
ANSC 650	Dairy Industry Travel Course	1
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM) (two-semester course)	8
ANSC 710	Dairy Nutrition	4
ANSC 715	Physiology of Lactation	4
or ANSC 724	Reproductive Management and Artificial Insemination	
ANSC 727	Advanced Dairy Management I	4
ANSC 728	Advanced Dairy Management II (will also fulfill the Capstone requirement)	4
Total Credits		**38**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ANSC 425 or ANSC 421	Introduction to Dairy Herd Management (preferred) or Introduction to Animal Science	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing (or Discovery)	4
	Credits	**16**
Spring		
AAS 423	Dairy Selection (Little Royal)	2
ANSC 406	Careers in Animal Science	1
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 404	General Chemistry II	4
ENGL 401	First-Year Writing (or Discovery)	4
	Credits	**15**
Second Year		
Fall		
AAS 432	Introduction to Forage and Grassland Management	3
ANSC 511	Animal Anatomy and Physiology I	4
ANSC 612	Genetics of Animals	4
ANSC 650	Dairy Industry Travel Course	1
Discovery course		4
	Credits	**16**
Spring		
ANSC 512	Animal Anatomy and Physiology II	4
ANSC 543	Technical Writing in Animal Sciences (WI) [1]	2
ANSC 548	Agricultural Business Management	4
BIOL 528	Applied Biostatistics I	4
Discovery course		4
	Credits	**18**
Third Year		
Fall		
ANSC 625	Animal Diseases	4
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM)	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
Discovery course		4
	Credits	**17**
Spring		
ANSC 609	Principles of Animal Nutrition	4
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM)	4

BMCB 501	Biological Chemistry	4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
ANSC 715	Physiology of Lactation (or Discovery course)	4
ANSC 727	Advanced Dairy Management I	4
Discovery course		4
Elective		4
	Credits	**16**
Spring		
ANSC 602	Animal Rights and Societal Issues (WI)	4
ANSC 710	Dairy Nutrition	4
ANSC 724	Reproductive Management and Artificial Insemination (or Discovery course)	4
ANSC 728	Advanced Dairy Management II (WI, capstone)	4
	Credits	**16**
	Total Credits	**130**

[1] ENGL 419, ENGL 501, ENGL 502 and ENGL 503 may be substituted.

Student Learning Outcomes

Program Learning Outcomes

Students will gain a fundamental knowledge of the animal science related disciplines of:

Anatomy & Physiology
- Students will be able to recognize the complimentary relationship of anatomic structure and function and accurately describe the basic physiologic processes of mammalian organ systems.

Nutrition
- Students will be able to identify, compare, contrast, and link different concepts regarding animal feeding and metabolism of carbohydrates, lipids, and protein in major livestock species and equine.

Genetics
- Students will understand basic principles and applications of inheritance, the difference between qualitative genetics, and be able to discuss the various disciplines within genetics.

Disease
- Students will understand the modes of transmission of infectious diseases, recognize signs of illness associated with notable diseases in livestock species, and be able to appropriately apply general concepts of disease prevention and biosecurity to a variety of management situations.

Reproduction
- Students will comprehend the mechanisms and endocrine control of gametogenesis, fertilization, pregnancy, and lactation and understand the variety of factors that can influence reproductive success.

Animal Ethics
- Students will recognize the numerous ways that humans use, benefit from, and conflict with non-human animals and have an awareness of the variety of motivations and influences that drive these relationships.

Critical Analysis & Communication
- Students will be able to develop critical questions that facilitate their independent investigation of topics related to animal science and demonstrate an integration of discipline specific knowledge through engaging in experiential education opportunities.
- Students will be able to conduct literature searches using relevant databases to critically evaluate both academic and popular press resources pertinent to the animal sciences.
- Students will be able to construct well-supported, effectively organized written arguments to express informed perspectives on animal science related topics. These writings will demonstrate professional style, appropriate mechanics (grammar, punctuation, and spelling), and the correct use of citations.

Animal Science Major: Equine Studies Option (B.S.)

https://www.unh.edu/program/bachelor-science/animal-science-equine-studies

Description

The Animal Science: Equine Studies option is designed to provide students with a foundation in the sciences, a breadth within the animal science discipline, and the depth to serve the equine industry. Through a hands-on curriculum, equine studies students receive training in areas important to pursuing a successful career in equine management and to pursue additional training leading to the M.S. or Ph.D. degree in equine science or its related disciplines. The UNH Equine facilities include a 40-stall barn, indoor and outdoor riding arenas, 3 regulation-size dressage competition arenas, an outdoor competition course, reproductive laboratory, as well as classrooms and conference space.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students will be required to earn a C- or better in the foundation courses and all required courses for the animal science major to receive credit toward graduation. Students failing to do this will need to retake the course in order to receive credit.

A. Foundation Science Courses required for all Animal Science majors

Code	Title	Credits
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BMCB 501	Biological Chemistry [1]	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
BIOL 528	Applied Biostatistics I	4
or HMP 540	Statistics for Health and Human Service Professionals	
or PSYC 402	Statistics in Psychology	
or SOC 402	Statistics	

B. Animal Science Core Courses required for all ANSC:Equine Studies option majors

Code	Title	Credits
ANSC 406	Careers in Animal Science	1
ANSC 511	Animal Anatomy and Physiology I	4
ANSC 512	Animal Anatomy and Physiology II	4
ANSC 543	Technical Writing in Animal Sciences [2]	2
ANSC 602	Animal Rights and Societal Issues	4
ANSC 609	Principles of Animal Nutrition	4
ANSC 612	Genetics of Animals	4
ANSC 625	Animal Diseases	4
ANSC 724	Reproductive Management and Artificial Insemination	4

C. Equine Core Courses required for all ANSC:Equine Studies option majors.

Code	Title	Credits
AAS 432	Introduction to Forage and Grassland Management	3
ANSC 427	Introduction to Equine Science	4
ANSC 522	Ethical Horsemanship - Considerations and Theory	3
ANSC 526	Equine Conformation, Movement, and Performance	4
ANSC 538	Equine Handling/Longeing	1
ANSC 647	Equine Stable Management	4
ANSC 665	Agricultural & Equine Event Design, Planning and Management	2
ANSC 704	Advanced Equine Physiology and Lameness	4
ANSC 797	Equine Capstone Experience	4

D. Equine Elective Courses

All Equine Option students will complete ≥ 8 elective credits of the courses listed below. Some courses are not offered every academic year. Students will work with their advisor to plan accordingly and customize their course selection to support their career goals and interests.

Code	Title	Credits
AAS 434	Equipment and Facilities Management	3
ANSC 500	Equine Assisted Services	4
ANSC 536	Preparation and Competition Techniques for the Modern Sport Horse	4
ANSC 548	Agricultural Business Management	4
ANSC 622	Further Explorations in Horsemanship Theory	2
ANSC 640	Principles of Riding Instruction	4
ANSC 641	Principles of Dressage Instruction	2
ANSC 642	Principles of Jumping Instruction	2
ANSC 643	Principles of Therapeutic Riding Instruction	4
ANSC 695	Supervised Teaching Experience	2
ANSC 799	Honors Senior Thesis	1-4

E. Professional Internship or Related Work Experience

Equine Studies option students will demonstrate evidence of a substantive work or internship experience in the equine industry. In collaboration with their advisors, students will select an appropriate setting based on their professional and career interests. Students will document this work via either credit-based ANSC 600 Field Experience or no-credit AAS 597 Applied Animal Science Work Experience.

1 Students interested in graduate school should take 2 semesters of Organic Chemistry (CHEM 651/CHEM 653 and CHEM 652/CHEM 654) and one semester of General Biochemistry (BMCB 658/BMCB 659) in place of BMCB 501.

2 ENGL 501 Introduction to Creative Nonfiction, ENGL 502 Professional and Technical Writing, ENGL 503 Persuasive Writing or ENGL 419 How to Read Anything.

Total Credits: 91

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ANSC 427	Introduction to Equine Science	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 403	General Chemistry I	4
Discovery Course or Elective [1]		4
	Credits	**16**
Spring		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 404	General Chemistry II	4
ENGL 401	First-Year Writing (WI)	4
Discovery Course or Elective [1]		4
	Credits	**16**
Second Year		
Fall		
AAS 432	Introduction to Forage and Grassland Management	3
ANSC 511	Animal Anatomy and Physiology I	4
ANSC 522	Ethical Horsemanship - Considerations and Theory (WI)	3
ANSC 538	Equine Handling/Longeing	1
Elective		4
	Credits	**15**
Spring		
ANSC 406	Careers in Animal Science	1
ANSC 512	Animal Anatomy and Physiology II	4
ANSC 526	Equine Conformation, Movement, and Performance	4
ANSC 543	Technical Writing in Animal Sciences (WI)	2
Discovery Course		4
	Credits	**15**

Third Year		
Fall		
ANSC 612	Genetics of Animals	4
ANSC 625	Animal Diseases	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
Elective		4
	Credits	**17**
Spring		
ANSC 609	Principles of Animal Nutrition	4
ANSC 647	Equine Stable Management	4
BMCB 501	Biological Chemistry	4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
ANSC 665	Agricultural & Equine Event Design, Planning and Management	2
ANSC 704	Advanced Equine Physiology and Lameness	4
BIOL 528 or HMP 540 or PSYC 402 or SOC 402	Applied Biostatistics I or Statistics for Health and Human Service Professionals or Statistics in Psychology or Statistics	4
Elective		4
Discovery Course		4
	Credits	**18**
Spring		
ANSC 602	Animal Rights and Societal Issues (WI)	4
ANSC 724	Reproductive Management and Artificial Insemination	4
ANSC 797	Equine Capstone Experience	4
Discovery Course		4
	Credits	**16**
	Total Credits	**129**

[1] ANSC 402 Horsemanship Lab is a popular elective for ANSC: EQU students; the course requires permission of the instructor.

Student Learning Outcomes

Program Learning Outcomes

As part of the foundation and core courses, all Animal Science students will gain a fundamental knowledge of the disciplines of:

Anatomy & Physiology

- Students will be able to recognize the complimentary relationship of anatomic structure and function and accurately describe the basic physiologic processes of mammalian organ systems.

Nutrition

- Students will be able to identify, compare, contrast, and link different concepts regarding animal feeding and metabolism of carbohydrates, lipids, and protein in major livestock species and equine.

Genetics

- Students will understand basic principles and applications of inheritance, the difference between qualitative and quantitative genetics, and be able to discuss the various disciplines within genetics.

Disease

- Students will understand the modes of transmission of infectious diseases, recognize signs of illness associated with notable diseases in livestock species, and be able to appropriately apply general concepts of disease prevention and biosecurity to a variety of management situations.

Reproduction

- Students will comprehend the mechanisms and endocrine control of gametogenesis, fertilization, pregnancy, and lactation and understand the variety of factors that can influence reproductive success.

Animal Ethics

- Students will recognize the numerous ways that humans use, benefit from, and conflict with non-human animals and have an awareness of the variety of motivations and influences that drive these relationships.

Critical Analysis & Communication

- Students will be able to develop critical questions that facilitate their independent investigation of topics related to animal science and demonstrate an integration of discipline specific knowledge through engaging in experiential education opportunities.
- Students will be able to conduct literature searches using relevant databases to critically evaluate both academic and popular press resources pertinent to the animal sciences.
- Students will be able to construct well-supported, effectively organized written arguments to express informed perspectives on animal science related topics. These writings will demonstrate professional style, appropriate mechanics (grammar, punctuation, and spelling), and the correct use of citations.

By completing the Equine Core, students will be able to:

- Explain and demonstrate safe, independent, and humane equine handling while recognizing and adapting to changes in equine behavior.
- Identify, explain, and demonstrate equine health and lameness management practices, parasite management and basic equine first aid.
- Demonstrate stable management skills including proper equine nutrition, feeding, and equipment and facilities management.
- Demonstrate technical proficiency with English tack, boots, bandages, and blankets.
- Demonstrate safe, competent longeing technique using a trained horse.
- Apply understanding of individual animal behavior and physiology to evaluate the connection between riding practices and health and performance of horses across disciplines.
- Communicate effectively, in written and verbal form, about professional topics in the equine industry, including the ability to instruct and supervise others in safe equine practices.

Animal Science Minor

https://www.unh.edu/program/minor/animal-science

Description

The study of animal science will provide you with an introduction to the biology and management of animal species. In this minor, you'll choose from a wide array of electives, with the potential to delve into topics such as animal genetics, diseases, and ethics, and gain hands-on equine, poultry and dairy experience. Your studies will prepare you for careers in various animal industries or further studies in veterinary medicine or graduate school.

Requirements

Academic policies related to Minors.

- A minor in Animal Science consists of completing a minimum of 20 credits of Animal Science (ANSC) courses.
- No more than 7 credits may be taken in the Thompson School of Applied Science (AAS) and at the 400-level.

Code	Title	Credits
Required Courses		
Introductory Courses		
Select one course from the following:		4
ANSC 425	Introduction to Dairy Herd Management	
ANSC 401	Animals and Society	
ANSC 421	Introduction to Animal Science	
ANSC 427	Introduction to Equine Science	
Experiential Courses		
Select a minimum of one course from the following:		2-12
ANSC 515	Explorations in Veterinary Medicine	
ANSC 526	Equine Conformation, Movement, and Performance	
ANSC 647	Equine Stable Management	
ANSC 603	Introduction to Livestock Management	
ANSC 605	Poultry Production and Health Management	
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM) [1]	
ANSC 728	Advanced Dairy Management II [1]	
ANSC 795	Investigations	
Additional Courses		
Select a minimum of one course from the following:		2-12
ANSC 511	Animal Anatomy and Physiology I	
ANSC 512	Animal Anatomy and Physiology II	
ANSC 543	Technical Writing in Animal Sciences	
ANSC 602	Animal Rights and Societal Issues	
ANSC 609	Principles of Animal Nutrition	
ANSC 612	Genetics of Animals	
ANSC 625	Animal Diseases	
ANSC 627	Animal Health Applications	
ANSC 670	Exotic Companion Species Health and Management	
ANSC 690	Livestock and Wildlife in Namibia: Challenges, Opportunities and Geography	
ANSC 701	Physiology of Reproduction	
ANSC 710	Dairy Nutrition	
ANSC 715	Physiology of Lactation	
ANSC 724	Reproductive Management and Artificial Insemination	
ANSC 750	Collaborative Farm Design and Development	

[1] Note that previous dairy course work is highly recommended for success in these upper level courses

Dairy Management Minor

https://www.unh.edu/program/minor/dairy-management

Description

Learn the fundamentals of running a dairy farm in this minor, from caring for the animals to managing the business end of the operation. In addition to courses in animal science, including biology, animal health, nutrition, genetics and reproduction, you'll be introduced to areas such as agribusiness finance, personnel management and public relations. Combine this minor with a major in animal science, biology, or agriculture and food systems to enhance your career opportunities or prepare for future graduate studies.

Requirements

Academic policies related to Minors.

A minor in Dairy Management consists of completing 20 credits.

Code	Title	Credits
Required Courses		
ANSC 425	Introduction to Dairy Herd Management	4
ANSC 710	Dairy Nutrition	4
ANSC 715	Physiology of Lactation	4
Select 8 credits from the following:		
AAS 423	Dairy Selection	2
ANSC 650	Dairy Industry Travel Course	1
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM) (must be taken for 2 semesters)	4
ANSC 728	Advanced Dairy Management II	4

Equine Assisted Services (Minor)

https://www.unh.edu/program/minor/equine-assisted-services

Description

The minor in Equine Assisted Services (EAS) provides students with exposure to several disciplines within this diverse field. The required courses introduce students to key concepts in equine handling and EAS, including equine skills and the opportunity to prepare for PATH International CTRI instructor certification in therapeutic riding. The elective courses list for the EAS minor is designed to provide students with supporting knowledge of equine-specific topics and non-profit challenges necessary for professionals working in the EAS field.

Requirements

Academic policies related to Minors.

The minor consists of completing a total of 20 credit hours.

Students pursuing a degree in Equine Studies will NOT be eligible to complete the minor.

Code	Title	Credits
Required Courses		
ANSC 427	Introduction to Equine Science	4
or ANSC 526	Equine Conformation, Movement, and Performance	
ANSC 402	Horsemanship Lab	1

or ANSC 538	Equine Handling/Longeing	
ANSC 500	Equine Assisted Services	4
ANSC 522	Ethical Horsemanship - Considerations and Theory	3
ANSC 643	Principles of Therapeutic Riding Instruction	4
Total Credits		**16**

Code	Title	Credits
Electives		
Select at least 4 credits from the following:		
ANSC 526	Equine Conformation, Movement, and Performance	4
ANSC 548	Agricultural Business Management	4
ANSC 640	Principles of Riding Instruction (W)	4
ANSC 641	Principles of Dressage Instruction	2
OT 510	Exploring Occupational Therapy and Occupation	4
ANSC 795	Investigations [1]	1-4
or ANSC 795W	Investigations	
PSYC 561	Psychopathology	4
RMP 501	Diversity, Equity, Inclusion, and Justice for Recreation Services	4

[1] Topics for ANSC 795 or ANSC 795W must be specific to Equine Assisted Services and serve the student's professional goals. Topics will be approved by the Minor Advisor.

Equine Studies Minor

https://www.unh.edu/program/minor/equine-studies

Description

The equine studies minor supports students' interest in horsemanship while also getting an introduction to equine science, equine industry and management, and equine assisted services. You'll be able to explore equine care and management, equine health, and equine anatomy while also working with horses to develop professional equine skills. Compliment any major with a minor in equine studies to expand your studies and/or possibilities for an equine-related career.

Students wanting to declare a minor in Equine Science must do so on Webcat by their Junior year. It is advisable to meet with the Minor coordinator in advance of this to verify your curriculum choices.

Requirements

Academic policies related to Minors.

A minor in equine studies consists of a completing a minimum of 20 credits of equine-related animal science courses.

- ANSC 402 may be counted only once for minor credit.
- Students must receive a minimum grade of C- in any course used for the minor. Students failing to do this will need to retake the course in order to receive credit.
- No courses taken on a pass(credit)/fail basis may count toward the minor.
- No more than 12 credits at the 400-level may be used for the minor.
- Students may petition equine faculty in their junior year to include a course that is not listed.
- Students must take at least one course at the 600- or 700-level.
- Students who transfer from other institutions may petition the equine program faculty for course approval.
- Students who choose both ANSC 500 and ANSC 643 as two of their courses toward the minor in equine studies will be eligible for PATH International therapeutic riding instructor certification.

Code	Title	Credits
Required Course		
ANSC 427	Introduction to Equine Science	4
Electives		
Select a minimum of 16 credits from the following:		
AAS 434	Equipment and Facilities Management	3
ANSC 402	Horsemanship Lab	1
ANSC 419	Horse Power	4
ANSC 500	Equine Assisted Services	4
ANSC 522	Ethical Horsemanship - Considerations and Theory	3
ANSC 526	Equine Conformation, Movement, and Performance	4
ANSC 536	Preparation and Competition Techniques for the Modern Sport Horse	4
ANSC 538	Equine Handling/Longeing	1
ANSC 548	Agricultural Business Management	4
ANSC 640	Principles of Riding Instruction	4
ANSC 641	Principles of Dressage Instruction	2
ANSC 642	Principles of Jumping Instruction	2
ANSC 643	Principles of Therapeutic Riding Instruction	4
ANSC 647	Equine Stable Management	4
ANSC 665	Agricultural & Equine Event Design, Planning and Management	2
ANSC 695	Supervised Teaching Experience [1]	1-2
ANSC 704	Advanced Equine Physiology and Lameness	4
ANSC 724	Reproductive Management and Artificial Insemination	4
ANSC 795	Investigations [1]	1-4
ANSC 795W	Investigations [1]	1-4
ANSC 799	Honors Senior Thesis [1]	1-4

[1] Subject to approval. Must be equine-related.

Biochemistry, Molecular and Cellular Biology (BMCB)

The field of biochemistry, molecular and cellular biology (BMCB) encompasses a wide range of life sciences, from biophysics and biochemistry to applied biology and medicine. The B.S. in biochemistry, molecular and cellular biology is designed for students to gain a solid foundation in biology, chemistry, physics, and mathematics, along with advanced knowledge in molecular biology, biochemistry, cell biology, and genetics. BMCB students have exposure to cutting-edge techniques and frontier research topics through inquiry-based learning and hands-on research opportunities. The program offers research opportunities with program faculty in the areas of structural biology, cell signaling pathways, cancer biology, gene regulation, neurobiology, cellular structure and function, and proteomics. Graduates are "profession-ready" and well-prepared for entry-level positions in biomedical research or in the biotechnology and pharmaceutical industries, for graduate education, or for post-baccalaureate professional programs (e.g., medical school, veterinary school, dental school, etc.).

The curriculum provides most of the required and recommended courses for students seeking admission to graduate schools and to professional schools in medicine, dentistry, veterinary medicine, or pharmacy. Students obtaining a B.S. in BMCB enjoy excellent job prospects immediately upon graduation, due to high demand for skilled research technicians in biotech and pharmaceutical companies, government agencies, academic research laboratories, and medical diagnostic laboratories. Graduates also have knowledge and skills that are valuable in the fields of management, sales, marketing, regulatory affairs, technical writing, and science journalism. Students who major in BMCB can also

use their training in conjunction with advanced degrees in law and business. With additional courses in education, the B.S. degree in BMCB also qualifies graduates to teach at the elementary, junior high, or high school levels.

Faculty participating in the BMCB major combine a passion for teaching and student advising with strong expertise and achievements in their research areas. BMCB faculty are committed to providing independent research experiences for undergraduate students, and most faculty have active and well-funded research programs utilizing state-of-the-art techniques and instruments. On-campus facilities that students can use to enhance their research experience include the Hubbard Center for Genome Studies, the University Instrumentation Center, and the Center of Integrated Biomedical and Bioengineering Research.

Pre-Professional Health Programs

Students interested in postgraduate education in healthcare occupations (e.g., medical, dental, physician assistant, pharmacy, etc.) should visit the UNH Pre-Professional Health Programs Advising Office. Students interested in veterinary medicine should consult the Pre-Veterinary Medicine Program. While many of the prerequisite courses required by professional schools are also requirements of the BMCB major, students should consult with their faculty adviser to create a plan of study that best prepares them for pursuing a career in the health professions.

https://colsa.unh.edu/molecular-cellular-biomedical-sciences

Programs

- Biochemistry, Molecular and Cellular Biology Major (B.S.) (p. 392)
- Biochemistry, Molecular and Cellular Biology Minor (p. 395)

Faculty

BMCB affiliated faculty.

Biochemistry, Molecular and Cellular Biology Major (B.S.)

https://www.unh.edu/program/bachelor-science/biochemistry-molecular-cellular-biology

Description

The Biochemistry, Molecular & Cellular Biology (BMCB) major provides you with conceptual competence, analytical skills, and laboratory experiences to understand life at the molecular and cellular level. Your BMCB degree will prepare you for immediate employment as a research associate in industry, for entry into graduate or professional programs in medicine, dentistry or other allied health professions, and other career tracks.

The BMCB program offers advanced coursework and laboratories in diverse research areas of modern biology

- Cancer biology
- Cell biology
- Cell culture & tissue engineering
- Endocrinology
- Molecular biology
- Pharmacology
- Physical biochemistry
- Protein structure, function & proteomics

BMCB majors participate in experiential learning activities

- Many courses have integrated laboratory experiences to foster inquiry-based learning and to train creative and critical thinkers
- Independent research experiences are available in faculty research laboratories
- Many courses provide exposure to cutting-edge techniques and instrumentation
- Job preparation can be enhanced by internships with regional biotechnology and pharmaceutical companies
- Summer undergraduate research fellowships at U.S. or international academic institutions combine travel with research opportunities outside UNH

BMCB graduates have been successful in many careers

- Research associates and laboratory technicians
  - Biotechnology and pharmaceutical companies
  - Government agencies
  - Forensics laboratories
  - Academic research laboratories
  - Hospitals
- Science journalists and technical writers
- Healthcare workers
- Pharmaceutical sales and marketing staff
- Regulatory agency staff
- Primary and secondary school educators (with additional coursework in education)

BMCB graduates are well prepared for post-baccalaureate education

- Masters and doctoral programs in a wide variety of disciplines
- Professional health programs
  - Medical
  - Dental
  - Pharmacy
  - Physician's Assistant and other allied health programs

Note: The BMCB major is designed so you can complete all of the prerequisite courses needed to seek admission to graduate schools or health professional schools in four years.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students in the Biochemistry, Molecular and Cellular Biology (BMCB) major take eight Foundation courses, four Bioscience Core courses, five BMCB Core courses, one Laboratory Techniques course, and three Major Elective courses. One capstone experience, supervised and approved within the major, is required of all seniors. In addition, all other University academic requirements must be completed, including those for the Discovery Program and the University Writing Requirement.

A grade of C- minus or better is required in all Foundation Core, Bioscience Core, BMCB Core, Laboratory Techniques, and Major Elective courses.

Code	Title	Credits
Foundation Core Courses		
CHEM 403	General Chemistry I [1]	4
CHEM 404	General Chemistry II	4
CHEM 547 & CHEM 549	Organic Chemistry I and Organic Chemistry Laboratory [2]	5
CHEM 548 & CHEM 550	Organic Chemistry II and Organic Chemistry Laboratory [2]	5
MATH 424B	Calculus for Life Sciences [3, 4]	4
BIOL 528	Applied Biostatistics I [4]	4
PHYS 401	Introduction to Physics I [5]	4
PHYS 402	Introduction to Physics II [5]	4

1 Fulfills Physical Science Discovery requirement
2 CHEM 651/CHEM 653 & CHEM 652/CHEM 654 can be substituted for CHEM 547/CHEM 549 & CHEM 548/CHEM 550.
3 Fulfills Quantitative Reasoning Discovery requirement
4 MATH 425 and MATH 426 can be substituted for MATH 424B and BIOL 528
5 PHYS 407 and PHYS 408 can be substituted for PHYS 401 and PHYS 402

Code	Title	Credits
Bioscience Core Courses		
BIOL 411	Introductory Biology: Molecular and Cellular [6]	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
GEN 604	Principles of Genetics	4

6 BIOL 411 fulfills the Biological Science Discovery requirement, Discovery Laboratory requirement, and Discovery Inquiry requirement

Code	Title	Credits
BMCB Core Courses		
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
BMCB 605	Principles of Cell Biology	4
BMCB 751	Principles of Biochemistry I	4
BMCB 752	Principles of Biochemistry II	4
GEN 704	Microbial Genetics and Genomics	4-5
or GEN 771	Molecular Genetics	

Code	Title	Credits
Laboratory Techniques Courses		
Select one course from the following:		
BMCB 753	Cell Culture	5
BMCB 754	Molecular Biology Research Methods	5
BMCB 755	Protein Biochemistry Laboratory	5
BMS 725	Cell Phenotyping and Tissue Engineering Laboratory	4
CHEM 741	Chemical Biology Laboratory	4

Code	Title	Credits
BMCB Major Electives		
Select three courses from the following: (A total of three unique major electives are required.)		
BMCB 750		3
BMCB 753	Cell Culture [7]	5
BMCB 754	Molecular Biology Research Methods [7]	5
BMCB 755	Protein Biochemistry Laboratory [7]	5
BMCB 760	Pharmacology	4
BMCB 763	Biochemistry of Cancer	4
BMCB 794	Protein Structure and Function	4
BMCB 795	Investigations in Molecular and Cellular Biology (4-credit minimum) [8]	1-4
BMCB 795W	Investigations in Molecular and Cellular Biology (4-credit minimum) [8]	1-4
BMCB 799	Senior Thesis (4-credit minimum) [8]	1-4
BMCB 799H	Honors Senior Thesis (4-credit minimum) [8]	1-4
BMS 507 & BMS 508	Human Anatomy and Physiology I and Human Anatomy and Physiology II	8
BMS 650	Molecular Diagnostics	4
BMS 702	Endocrinology	4
BMS 704	Pathologic Basis of Disease	4
BMS 705 & BMS 715	Immunology and Immunology Laboratory	5
BMS 706 & BMS 708	Virology and Virology Laboratory	5
BMS 718	Mammalian Physiology	4
BMS 725	Cell Phenotyping and Tissue Engineering Laboratory [7]	4
BMS 735	Molecular and Cellular Parasitology	4
BMS 740	Human Microbiome	4
BIOL 706	Data Science with R for the Life Sciences	4
CHBE 755	Computational Molecular Bioengineering	4
CHEM 740	Chemical Biology	3
CHEM 755	Advanced Organic Chemistry	3
GEN 704	Microbial Genetics and Genomics [7]	5
GEN 705	Population Genetics [9]	3
GEN 706	Human Genetics	4
GEN 711	Genomics and Bioinformatics	4
GEN 712	Programming for Bioinformatics	5
GEN 715	Molecular Evolution	4
GEN 717	Molecular Microbiology	5
GEN 721	Comparative Genomics	4
GEN 771	Molecular Genetics [7]	4
NUTR 750	Nutritional Biochemistry	4

7 If course is used to fulfill BMCB Core or Laboratory Technique requirement, course cannot count as BMCB Major Elective.
8 Choose no more than ONE of the following courses to fulfill a major elective: BMCB 795, BMCB 795W, BMCB 799, BMCB 799H
9 Taking GEN 725 Population Genetics Lab is recommended, but not required.

Approved BMCB Capstone Courses

The capstone explores areas of interest based on the integration of prior learning. The capstone requirement may be satisfied through a course, created work or product, or some form of experiential learning (e.g., honors thesis, mentored research project, or other special student activity). Students may take more than one capstone course. If a second Lab Techniques course is taken, the second Lab Techniques course may count as a Capstone. Capstone completion is never displayed on Degree Works; your advisor will certify capstone completion at the time of graduation. Students must have 90 credits or more when completing their capstone requirement. See your advisor for questions about capstones.

Code	Title	Credits
BMCB 750		3
BMCB 760	Pharmacology	4
BMCB 763	Biochemistry of Cancer	4
BMCB 794	Protein Structure and Function	4
BMCB 795	Investigations in Molecular and Cellular Biology (4-credit minimum)	1-4
BMCB 795W	Investigations in Molecular and Cellular Biology (4-credit minimum)	1-4
BMCB 799	Senior Thesis (4-credit minimum)	1-4
BMCB 799H	Honors Senior Thesis (4-credit minimum)	1-4
BMS 702	Endocrinology	4
INCO 790	Advanced Research Experience (4-credit minimum)	1-4

For a Capstone experience not listed above, such as an internship, submit a Capstone Approval form **prior** to beginning the experience.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
ENGL 401	First-Year Writing	4
CHEM 403	General Chemistry I	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
Discovery Course		4
	Credits	**17**
Spring		
CHEM 404	General Chemistry II	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
MATH 424B	Calculus for Life Sciences	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
CHEM 547 & CHEM 549	Organic Chemistry I and Organic Chemistry Laboratory	5
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BIOL 528	Applied Biostatistics I	4
PHYS 401	Introduction to Physics I	4
	Credits	**18**
Spring		
CHEM 548 & CHEM 550	Organic Chemistry II and Organic Chemistry Laboratory	5
GEN 604	Principles of Genetics	4
PHYS 402	Introduction to Physics II	4
Discovery Course		4
	Credits	**17**
Third Year		
Fall		
BMCB 605	Principles of Cell Biology	4
BMCB 751	Principles of Biochemistry I	4
BMCB Core or Lab Techniques course		4-5
Discovery Course		4
	Credits	**16-17**
Spring		
BMCB 752	Principles of Biochemistry II	4
BMCB Core or Lab Techniques course		4-5
Discovery Course		4
Elective (any course)		4
	Credits	**16-17**
Fourth Year		
Fall		
BMCB Major Elective (possible Capstone)		4
Discovery Course		4
BMCB Major Elective (any course)		4
Elective (any course)		4
	Credits	**16**
Spring		
Elective (any course)		4-5
BMCB Major Elective		4
Elective (any course)		4
	Credits	**12-13**
	Total Credits	**128-131**

Student Learning Outcomes

Program Learning Outcomes

Core Knowledge in Biochemistry, Molecular Biology, and Cell Biology

- Students will be able to explain the structure and function of macromolecules, including key functional groups, higher order structure and function of macromolecules, catalysis and enzyme kinetics.
- Students will be able to explain matter and energy conversion, including thermodynamics, catalysis, biological energy, ATP and its function in metabolism.
- Students will be able to explain cellular homeostasis, including major metabolic pathways for carbohydrates, lipids, proteins and nucleic acids, key regulatory steps in these pathways and the organization of metabolic enzymes.
- Students will be able to explain the flow of biological information, including detailed replication, transcription and translation processes in the context of homeostasis and development.

Quantitative Literacy, Inquiry & Analysis

- Students will be able to apply the scientific method to examine experimental evidence and draw informed conclusions.
- Students will be able to use graphs to represent scientific data.
- Students will be able to apply statistical methods to interpret scientific data.

Critical Thinking & Problem Solving

- Students will be able to use data to troubleshoot an unexpected outcome.
- Students will be able to apply core knowledge to critically interpret scientific data.

Written Communication

- Students will demonstrate written skills to communicate scientific knowledge and experimental data.

Oral Communication

- Students will be able to demonstrate oral presentation skills to communicate scientific knowledge and experimental data.

Biochemistry, Molecular and Cellular Biology Minor

https://www.unh.edu/program/minor/biochemistry-molecular-cellular-biology

Description

Students who wish to develop focused competencies in biochemistry, molecular biology, and/or cell biology can complement their major academic program with a minor in biochemistry, molecular and cellular biology (BMCB).

Requirements

Academic policies related to Minors.

The minor consists of completing a minimum of five courses (20 credits).

Select from the following courses:

Code	Title	Credits
BMCB 605	Principles of Cell Biology	4
BMCB 750		3
BMCB 751	Principles of Biochemistry I	4
BMCB 752	Principles of Biochemistry II	4
BMCB 753	Cell Culture	5
BMCB 754	Molecular Biology Research Methods	5
BMCB 755	Protein Biochemistry Laboratory	5
BMCB 760	Pharmacology	4
BMCB 763	Biochemistry of Cancer	4
BMCB 794	Protein Structure and Function	4
BMCB 795	Investigations in Molecular and Cellular Biology (4-credit maximum)	1-4
GEN 704	Microbial Genetics and Genomics	5
GEN 771	Molecular Genetics	4

Biology

UNH's location and facilities provide unique opportunities for the study of biology due to its access to the seacoast, the Shoals Marine Laboratory, the lakes region of NH, and White Mountain National Forest. The Biology faculty strongly believe in a hands-on approach to teaching and active involvement of undergraduates in research. We have a wide range of faculty expertise, including freshwater, estuarine, ecology, physiology, neurobiology, and behavior. A Biology degree provides the background for a variety of professional positions in the public and private sectors, and provides an excellent foundation for students seeking to apply for graduate, medical, or veterinary school.

https://colsa.unh.edu/biological-sciences

Programs

- Biology Major (B.S.) (p. 395)
- Biology Minor (p. 398)
- Plant Biology Minor (p. 399)

Faculty

Department of Biological Sciences Faculty

Biology Major (B.S.)

https://www.unh.edu/program/bachelor-science/biology

Description

Biology is one of the most popular science majors since it provides a broad background in the biological sciences while allowing flexibility and specialization within the major. It integrates theoretical and practical (hands-on laboratory and field work) courses in different aspects of the biology of multicellular life. It encompasses the study of structural and functional relationships of living organisms at the molecular, cellular, and organismal level, the interactions of living systems with the environment and with each other, and the evolutionary relationships of life. Our goal is to create an environment for those with a scholarly interest in the biological sciences, and to extend their understanding, awareness, and appreciation of the diversity inherent in the biological sciences. Our major is aimed at promoting an excellent education in biological sciences by involving undergraduate students in a strong interaction with faculty both in the classroom and in research laboratories.

The biology major prepares students for post graduate degrees in the biological and medical fields, and for job opportunities in industry (environmental, biomedical, pharmaceutical, and biotechnological) and governmental research, and secondary school teaching. Completion of the four-year undergraduate program plus a fifth-year internship will be necessary for biology teaching certification. Students who plan to enter medical, dental, or related professional schools are advised to confer with their faculty adviser to work the requirements for these programs into their academic majors.

Core courses in the biology major are from departments that contribute to the biological sciences community at UNH. The core curriculum consists of introductory and upper-level science courses plus seven additional courses in the biological sciences; three of these must be selected from course lists in three broad categories.

While students are advised to declare the biology major as incoming first-year students to assure adequate program planning, transfer into this major at a later stage is also possible. Several of the other biological science majors share the same biology core curriculum. For the first to two years, it is quite easy to change to or from these other majors.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The biology courses in the core curriculum constitute an integrated sequence that train students in the basic skills and concepts of knowledge inherent to the biological sciences. The biology core allows a student to obtain a broad background in biology, and in the related physical sciences and math that provide a foundation for success in understanding biological principals.

To receive the B.S. degree in biology, students must complete 128 credit hours with at least a 2.0 cumulative grade-point average for completion of the degree. All UNH Discovery Program requirements, biology core curriculum requirements, plus seven additional courses from the biological sciences, and a capstone experience. A minimum grade of C- is required in all biological science courses that are counted toward the requirements for a degree in biology. Students who expect to compete successfully for post-baccalaureate programs should attain a cumulative GPA of 3.0 or higher by the end of the sophomore year and maintain it at that level.

Code	Title	Credits
Core Curriculum Courses		
BIOL 400	Professional Perspectives on Biology [1]	1
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 541W	Ecology	4
GEN 604	Principles of Genetics	4
ZOOL 690	Evolution	4
CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	8
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory [2]	5
MATH 424B	Calculus for Life Sciences	4
or BIOL 428	Quantitative Biosciences	
or BIOL 633	Data Analysis for Life Science	
or BIOL 711	Experimental Design & Analysis	
or BIOL 706	Data Science with R for the Life Sciences	
BIOL 528	Applied Biostatistics I	4
PHYS 401 & PHYS 402	Introduction to Physics I and Introduction to Physics II	8
BMCB 658A	General Biochemistry	3
BIOL 780	Capstone Companion Course	1
Total Credits		**54**

Biology Electives

In addition to the biology core curriculum, students must complete seven biology elective courses. One course must be taken from each of the three categories/disciplines; the other four electives can be chosen from the category lists or can be any other biological sciences course with approval of the student's adviser. All courses must be 500-level or above. There must be one animal-identified course (A) and one plant/fungal/algae course (FP). One capstone experience is required of all seniors; see subsequent section on capstones for detailed requirements. Corequisite lecture and lab courses count as one course.

Code	Title	Credits
Category 1: Form and Function (Morphology, Anatomy and Physiology)		
ANSC 511	Animal Anatomy and Physiology I (A)	4
ANSC 512	Animal Anatomy and Physiology II (A)	4
ANSC 701	Physiology of Reproduction (A)	4
ANTH 660	Human Osteology (A)	4
BIOL 701	Plant Physiology (FP)	4
BIOL 775	Plant Rx (FP, C)	3
BMS 507	Human Anatomy and Physiology I (A)	4
BMS 508	Human Anatomy and Physiology II (A)	4
BMS 702	Endocrinology (A)	4
BMS 718	Mammalian Physiology (A)	4
MEFB 628	Marine Invertebrate Evolution and Ecology (A)	5
MEFB 754	Anatomy and Function of Marine Vertebrates (SML, A)	4
MEFB 773	Physiology of Fishes (A)	4
ZOOL 518	Comparative Morphology and Biology of Vertebrates (A)	4
ZOOL 625	Principles of Animal Physiology (A, ZOOL 626 Lab optional)	3
ZOOL 777W	Neuroethology (A, C)	4
Category 2: Genetics/Development (including molecular biology and bioinformatics)		
ANSC 612	Genetics of Animals (A)	4
BMCB 605	Principles of Cell Biology	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
GEN 704	Microbial Genetics and Genomics	5
GEN 705	Population Genetics (GEN 725 lab optional)	3
GEN 706	Human Genetics (A)	4
GEN 711	Genomics and Bioinformatics	4
GEN 721	Comparative Genomics	4
GEN 771	Molecular Genetics	4
GEN 772	Evolutionary Genetics of Plants (FP)	4
ZOOL 529	Developmental Biology (A)	4
ZOOL 736	Genes and Behavior (A, C)	4
Category 3: Evolution, Ecology and Biodiversity (including population biology)		
BIOL 510	Mushrooms, Molds, and Mildews: Introduction to the Fungal Kingdom (FP)	4
BIOL 566	Systematic Botany (FP)	4
BIOL 704	Plant-Microbe Interactions (FP)	3
BIOL 720	Plant-Animal Interactions (FP, C)	4
BIOL 752	New England Mushrooms: a Field and Lab Exploration (FP)	4
GEN 715	Molecular Evolution	4
MEFB 503	Introduction to Marine Biology	4
MEFB 510	Field Ornithology (SML, A)	4
MEFB 530	Evolution and Marine Diversity (SML)	4
MEFB 625	Introduction to Marine Botany (FP)	5
MEFB 675	Marine Mammal Biology and Conservation	3
MEFB 674	Ecology and Marine Environment (SML)	4
MEFB 714	Field Animal Behavior (SML, A)	4
MEFB 717	Lake Ecology	4
MEFB 725	Marine Ecology	4
MEFB 747	Aquatic Plants in Restoration/Management (FP, C)	4
MEFB 772	Fisheries Biology: Conservation and Management (A)	4
NR 506	Forest Entomology (A)	4
NR 642	Introduction to Biogeography	4
NR 660	Ecology and Biogeography of New Zealand	5
NR 663	Applied Directed Research in New Zealand	4
NR 712	Mammalogy (A)	4
NR 713	Quantitative Ecology	4
ZOOL 542	Ornithology (A)	4
ZOOL 555	Introduction to Entomology (A)	4
ZOOL 566	Herpetology (A)	4
ZOOL 613W	Animal Behavior	5
ZOOL 708	Stream Ecology (C)	4
ZOOL 710	Sharks and Bony Fishes (A)	4

ZOOL 726	Conservation Behavior (A, C)	4
ZOOL 733W	Behavioral Ecology (C)	4
ZOOL 740	Acoustic Ecology (C)	4
Other Elective Options		
AGFS 651	Plant Pathology (FP)	4
ANTH 661	Advanced Human Osteology (A)	4
BIOL 600	Field Experience [3]	1-4
BIOL 633	Data Analysis for Life Science	4
BIOL 695	Biology Teaching Practices [3]	1-4
BIOL 700	Current and Controversial Issues in Biology (C)	4
BIOL 706	Data Science with R for the Life Sciences	4
BIOL 711	Experimental Design & Analysis	4
BIOL 795	Independent Investigations in Biology [3]	1-4
BIOL 799H	Honors Senior Thesis	2-8
BMCB 753	Cell Culture	5
BMCB 760	Pharmacology	4
BMCB 763	Biochemistry of Cancer	4
BMS 602 & BMS 603	Pathogenic Microbiology and Pathogenic Microbiology Laboratory	5
BMS 655	Human and Animal Parasites (A)	3
BMS 703	Infectious Disease and Health	4
BMS 704	Pathologic Basis of Disease	4
BMS 705	Immunology (BMS 715 optional lab)	3
BMS 706 & BMS 708	Virology and Virology Laboratory	5
BMS 711		4
GEN 717	Molecular Microbiology	5
HMP 501	Epidemiology and Community Medicine	4
MEFB 590	Coastlines in Crisis	4
MEFB 741	Sharks: Biology and Conservation (A)	4
MEFB 755	Biological Oceanography (C)	3
NR 508	Communicating Science	4
NR 641	Wildlife Disease Ecology	4
NSB 727	Animal Communication (A, C)	4
PSYC 531	Psychobiology	4
PSYC 731	Brain and Behavior	4
PSYC 733	Drugs and Behavior	4
TECH 797	Undergraduate Ocean Research Project (A, C) [4]	2
ZOOL 610	Principles of Aquaculture	4

1 BIOL 400 Professional Perspectives on Biology is required only for first-year biology majors.

2 Students exploring pre-health professions should take a full year of Organic Chemistry (CHEM 651/CHEM 653 and CHEM 652/CHEM 654).

3 A 600, 695, 795, or 799 experience may substitute for one elective with academic advisor approval, but only if taken for at least four credits. These four credits may be spread over multiple semesters if they are consecutive and with the same faculty mentor.

4 This class requires enrollment in both fall and spring sections, 2 credits/semester for a total of 4 credits.

A 600, 695, 795, or 799 experience may substitute for one elective in any category with academic advisor approval, but only if taken for at least four credits. These four credits may be spread over multiple semesters if they are consecutive and with the same faculty mentor.

Note: It is strongly recommended that students participate in an exchange semester at another university, or in a field-oriented program or internship. There are many exchange opportunities available in which a full semester of credits toward the major may be earned. It is further recommended that students explore possibilities of one or more semesters of independent investigation (research projects). For details, students should contact their adviser. Financial support is available for most of these programs. In addition, students can explore the courses at the Shoals Marine Laboratory (SML), which provides an excellent setting for several "field-oriented" courses during the summer. Often there is financial support available for the SML programs. (See the SML website at https://marine.unh.edu/SML or the Cornell website at http://www.shoalsmarinelaboratory.org for details.)

Capstone Experience

As part of the University of New Hampshire's Discovery Program requirements, all students must complete a capstone experience during their senior year (after earning at least 90 credits). **The capstone experience for students majoring in Biology consists of BOTH (1) an approved individual experience AND (2) the successful completion of the BIOL 780 Capstone Companion Course.** Students will not be approved for graduation until capstone certification has been granted.

1) The individual experience

The individual experience may be satisfied through various forms of experiential learning (e.g., Honors thesis, mentored research project, internship) or a course denoted with a "(C)" in the courses listed above. The individual experience must fulfill **at least one** of the University's capstone criteria:

- synthesizes and applies disciplinary knowledge and skills
- fosters reflection on undergraduate learning and experience
- demonstrates emerging professional competencies
- applies, analyzes, and/or interprets research, data, or artistic expression
- explores areas of interest based on the integration of the prior learning

Before beginning *any* capstone individual experience, students MUST SUBMIT A COMPLETED CAPSTONE APPROVAL FORM to their Program Coordinator.

Students can obtain this form on the Department's Capstone page or from their Program Coordinator. Here they will describe their proposed individual experience and how it fulfills at least one of the University's capstone criteria listed above. If the student is selecting a "C" course for their individual experience, they should obtain the course syllabus from the instructor for information about the course's content and learning objectives.

2) Enrollment in BIOL 780

Students will also be required to enroll in BIOL 780 Capstone Companion Course (1 cr.) **during the semester of their individual experience.** BIOL 780 is offered every Fall and Spring semester.

- If the individual experience is a two-semester thesis, BIOL 780 should be taken during the second semester.
- If the individual experience occurs during the summer (e.g., internship), BIOL 780 should be taken during the Fall semester that immediately follows.
- Note: Because BIOL 780 is not offered during the summer, students cannot complete their individual experience during the summer *and graduate during that same September*. Summer experiences could only be used as individual capstone experiences if completed the summer before the student's senior year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
ENGL 401	First-Year Writing	4
CHEM 403	General Chemistry I	4
BIOL 400	Professional Perspectives on Biology	1
Discovery Course		4
	Credits	**17**
Spring		
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 404	General Chemistry II	4
Discovery Course		4
Discovery Course or Major Elective		4
	Credits	**16**
Second Year		
Fall		
BIOL 541W	Ecology	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory [1]	5
Major Elective		4
Disovery Course		4
	Credits	**17**
Spring		
BIOL 528	Applied Biostatistics I	4
GEN 604	Principles of Genetics	4
Major Elective		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
PHYS 401	Introduction to Physics I	4
BMCB 658A	General Biochemistry	3
ZOOL 690	Evolution	4
Major Elective		4
	Credits	**15**
Spring		
PHYS 402	Introduction to Physics II	4
Discovery Course		4
Second Quant Course		4
Major Elective		4
	Credits	**16**
Fourth Year		
Fall		
Major Elective		4
Major Elective		4
Capstone		4
General Electives		4
	Credits	**16**
Spring		
Major Elective		4
General Elective		4
General Elective		4
	Credits	**12**
	Total Credits	**125**

[1] Pre-professionals take one year of organic chemistry.

Student Learning Outcomes

Program Learning Outcomes

- Students demonstrate that they understand basic principles of biology. Demonstrate a fundamental understanding of the relationships between structure, function, and process at the level of molecular, cellular, and organismal levels. Describe the principles and mechanisms of organismal evolution and genetics as the central unifying and explanatory concepts of biology. Explain the relationship between organisms and their physical, chemical, and biological environments. Explain what biodiversity is, its value in ecosystems, and the need for its conservation.
- Students demonstrate that they can undertake scientifically valid methods of inquiry. Demonstrate proficiency in searching, reading, and understanding scientific literature. Apply the scientific process, including the framework of initiation, designing, and conducting experiments, and the appropriate analysis and discussion based on the data gathered. Exhibit technical skills in the use of appropriate laboratory and field techniques commonly used in biology.
- Students demonstrate that they can think critically and analytically. Demonstrate an ability to critically and objectively evaluate data, develop hypotheses, interpret and or design biological experiments and studies.
- Students demonstrate that they can communicate effectively. Communicate scientific material effectively in written and oral formats.
- Students practice science responsibly and ethically, and acknowledge the influence of cultural and historical biases in the sciences.

Biology Minor

https://www.unh.edu/program/minor/biology

Description

The Biology Minor is designed to give students a broad background in basic biological understanding of life processes, while providing experiences in ecology, evolution, and organismal diversity. Five courses are required for completion of the minor, of which no more than two can overlap with major requirements.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BIOL 541W	Ecology	4
or ZOOL 690	Evolution	
Organismal Survey Courses [1]		
Animal Survey - select one course from the following:		4-5
MEFB 628	Marine Invertebrate Evolution and Ecology	
ZOOL 542	Ornithology	
ZOOL 710	Sharks and Bony Fishes	
ZOOL 566	Herpetology	
NR 712	Mammalogy	
Plant or Fungi Survey - select one course from the following:		4
BIOL 566	Systematic Botany (Plant Survey Course)	
BIOL 752	New England Mushrooms: a Field and Lab Exploration (Fungus Survey Course)	
Total Credits		**20-21**

[1] Two survey courses are required. One course must focus on animals, and the other on plants or fungi.

Student Learning Outcomes

Program Learning Outcomes

- Identify the foundational concepts in the field of Biology.
- Analyze and synthesize data and relevant primary literature.

Plant Biology Minor

https://www.unh.edu/program/minor/plant-biology

Description

The Minor in Plant Biology is designed to provide a broad introduction to plant biology and why plants are important to humans, while providing a framework for understanding plant diversity, function, and behavior. Electives allow the opportunity to choose a specialized area of plant biology that is of interest.

Requirements

Academic policies related to Minors.

Five courses are required for completion of the minor.

Code	Title	Credits
Required Courses		
BIOL 409	Green Life: Introducing the Botanical Sciences	4
BIOL 566	Systematic Botany	4
BIOL 408	Plants and Civilization	4
or AGFS 421	Introductory Horticulture	
Select two additional plant-based courses from the following:		8
AGFS 651	Plant Pathology	4
BIOL 704	Plant-Microbe Interactions	3
BIOL 720	Plant-Animal Interactions	4
BIOL 795	Independent Investigations in Biology (If taken for 4 credits)	4
GEN 772	Evolutionary Genetics of Plants	4
MEFB 625	Introduction to Marine Botany	5
MEFB 747	Aquatic Plants in Restoration/Management	4
MEFB 795	Independent Investigations in Marine, Estuarine, and Freshwater Biology (If taken for 4 credits)	4

Biomedical Science (BMS)

The Biomedical Science (BMS) major focuses on fundamental concepts in biological sciences as they apply to human and animal health, medicine, and disease. Students attracted to Biomedical Science have a profound interest in human and animal physiology and diseases. The BMS major has one option: Medical and Veterinary Sciences (MVS). The option in the BMS major is based on foundational and advanced courses in chemistry and the biological sciences. BMS:MVS focuses on health and manifestations of disease in animals, including humans.

Faculty in the BMS major have expertise in many areas of biomedical science, including physiology, cell biology, infectious diseases, veterinary pathology, and laboratory medicine. The biomedical science faculty strongly encourage students to complement their academic courses with experiential learning opportunities through internships, field experience, and independent research projects conducted with biomedical research faculty. On-campus facilities include state-of-the-art research and teaching laboratories and the New Hampshire Veterinary Diagnostic Laboratory (NHVDL) that provide unique learning opportunities for students interested in veterinary medicine, pathobiology, and laboratory diagnostics.

There is high demand for skilled biomedical scientists as research assistants/technicians in biotechnology companies, pharmaceutical companies, government agencies, forensics, academic research laboratories, and hospitals, so BMS majors enjoy excellent job prospects upon graduation. The BMS curriculum also provides graduates with the required and recommended courses for admission to most graduate schools and professional schools of medicine, veterinary medicine, dentistry, public health, and pharmacy, as well as to physician assistant and pathologist's assistant programs. BMS graduates have a knowledge base that is valuable in the fields of sales, marketing, regulatory affairs, technical writing, patent law, and scientific journalism. With additional courses in education, the B.S. in biomedical science also qualifies graduates to teach at the elementary, junior high, or high school levels.

Pre-Professional Health Programs

Students interested in postgraduate careers in the health care professions (e.g., physician, dentist, physician assistant, pharmacist, etc.) should visit the Pre-Professional Health Programs Advising Office. Students interested in veterinary medicine should consult the Pre-Veterinary Medicine Program. While many of the prerequisite courses required by professional schools are also requirements of the biomedical science major, students should consult with their faculty adviser to create a plan of study that best prepares them for pursuing a career in one of these human and animal health professions.

https://colsa.unh.edu/molecular-cellular-biomedical-sciences

Programs

- Biomedical Science Major: Medical and Veterinary Sciences Option (B.S.) (p. 400)
- Biomedical Science Minor (p. 403)

Faculty

Biomedical Science affiliated faculty.

Biomedical Science Major: Medical and Veterinary Sciences Option (B.S.)

https://www.unh.edu/program/bachelor-science/biomedical-science-medical-veterinary-sciences

Description

The **Biomedical Science: Medical and Veterinary Sciences (BMS:MVS)** program is informed by the principles of the One Health Initiative, which unites human and veterinary medicine. This rigorous academic program meets requirements for entry into veterinary school, medical school, and graduate school in the area of biomedical science or for a career as a research scientist in either the biotechnology/pharmaceutical sector or government and academic research labs.

You will select elective courses from three major areas of study:

- biomedical systems
- pathobiology and disease
- health and environmental issues

As a BMS:MVS major, you have many opportunities for career-relevant learning experiences including:

- NH Veterinary Diagnostic Laboratory located on the UNH campus
- UNH Agricultural Experiment Station farm facilities
- independent research in laboratories of UNH faculty in the biomedical and biological sciences
- experience in local hospitals
- internships in biotechnology and pharmaceutical companies in the Greater Boston area

BMS:MVS graduates are prepared for post-baccalaureate education in:

- **professional health programs**
  - veterinary school
  - medical school
  - allied health programs (physician assistant or pathologist's assistant)
- **graduate programs**
  - biomedical science
  - pathology
  - public health
  - nursing

Careers of previous Medical & Veterinary Sciences graduates include:

- **research scientists/laboratory technicians**
  - biotechnology and pharmaceutical companies
  - academic biomedical research programs
  - forensic laboratories
  - hospitals/health clinics
- **state and federal government employment**
  - public health laboratories
  - health inspector (e.g., Food and Drug Administration)

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students in the Medical and Veterinary Sciences (MVS) option take eight Foundation courses, six Bioscience Core courses, three BMS-MVS Core courses, and six BMS-MVS Major Elective courses. One capstone experience, supervised and approved within the major, is required of all seniors. In addition, all other university academic requirements must be completed, including those for the Discovery Program and the University Writing Program requirements.

A grade of C- minus or above is required in all courses within the major, which includes Foundation, Bioscience Core, and BMS-MVS Core courses, and BMS-MVS Major Electives.

Students applying to health profession schools need a full year of English. ENGL 415C, ENGL 419, ENGL 501, ENGL 502 or ENGL 503 should be taken in addition to ENGL 401. For more information contact the Pre-Professional Health Program Advising Office.

Code	Title	Credits
Foundation Courses		
CHEM 403	General Chemistry I [1]	4
CHEM 404	General Chemistry II	4
CHEM 651 & CHEM 653	Organic Chemistry I and Organic Chemistry Laboratory	5
CHEM 652 & CHEM 654	Organic Chemistry II and Organic Chemistry Laboratory	5
MATH 424B	Calculus for Life Sciences [2]	4
BIOL 528	Applied Biostatistics I	4
PHYS 401	Introduction to Physics I	4
PHYS 402	Introduction to Physics II	4

1 CHEM 403 fulfills the Physical Science Discovery requirement
2 MATH 424B fulfills the Quantitative Reasoning Discovery requirement

Code	Title	Credits
Bioscience Core Courses		
BIOL 411	Introductory Biology: Molecular and Cellular [3]	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
GEN 604	Principles of Genetics	4
BMCB 605	Principles of Cell Biology	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5

[3] BIOL 411 fulfills the Biological Science Discovery requirement, Discovery Laboratory requirement, and the Discovery Inquiry requirement.

Code	Title	Credits
BMS-MVS Core Courses		
BMS 507	Human Anatomy and Physiology I	4
or ANSC 511	Animal Anatomy and Physiology I	
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
BMS 508	Human Anatomy and Physiology II	4
or ANSC 512	Animal Anatomy and Physiology II	

BMS-MVS Major Elective Courses

A total of six **unique** major elective courses are required. Two courses must be taken in each of the following subject areas: biomedical systems, pathobiology and disease, and health and environmental issues.

Code	Title	Credits
Biomedical Systems Electives		
Recommended Courses		
BMS 702	Endocrinology	4
BMS 718	Mammalian Physiology	4
BMCB 760	Pharmacology	4
GEN 717	Molecular Microbiology	5
NUTR 750	Nutritional Biochemistry	4
NUTR 751	Nutritional Biochemistry of Micronutrients	4

Code	Title	Credits
Other Appropriate Courses		
BMS 623	Histology: Microscopic Cellular Structure and Function	4
BMS 740	Human Microbiome	4
ANSC 603	Introduction to Livestock Management	4
ANSC 605	Poultry Production and Health Management	4
ANSC 609	Principles of Animal Nutrition	4
ANSC 612	Genetics of Animals	4
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM)	4
ANSC 701	Physiology of Reproduction	4
ANSC 710	Dairy Nutrition	4
ANSC 715	Physiology of Lactation	4
ANSC 724	Reproductive Management and Artificial Insemination	4
BMCB 753	Cell Culture	5
BMCB 754	Molecular Biology Research Methods	5
BMCB 794	Protein Structure and Function	4
GEN 704	Microbial Genetics and Genomics	5
GEN 705	Population Genetics [4]	3
GEN 706	Human Genetics	4
GEN 711	Genomics and Bioinformatics	4
GEN 713	Microbial Ecology and Evolution	4
GEN 715	Molecular Evolution	4
GEN 721	Comparative Genomics	4
GEN 771	Molecular Genetics	4
KIN 684 & KIN 685	Emergency Medical Care: Emergency Medical Technician (EMT) and Emergency Medical Care: EMT Lab	6
ZOOL 613W	Animal Behavior	5
ZOOL 777W	Neuroethology	4

[4] Enrolling in GEN 725 concurrently is encouraged but not required

Code	Title	Credits
Pathobiology and Disease Electives		
Recommended Courses		
BMS 602	Pathogenic Microbiology	3
BMS 655	Human and Animal Parasites	3
BMS 704	Pathologic Basis of Disease	4
BMS 705	Immunology	3
BMS 711		4
BMS 719	Host-Microbe Interactions	4
BMCB 763	Biochemistry of Cancer	4

Code	Title	Credits
Other Appropriate Courses		
BMS 644	Clinical Hematology	3
BMS 650	Molecular Diagnostics	4
BMS 656	Immunohematology	3
BMS 658	Medical Biochemistry	3
BMS 703	Infectious Disease and Health	4
BMS 706	Virology	3
BMS 712	Experiences in Applied Veterinary Diagnostics (4-credit minimum)	2
BMS 720	Mycology, Parasitology, and Virology	3
BMS 735	Molecular and Cellular Parasitology	4
ANSC 627	Animal Health Applications	4
NUTR 773	Clinical Nutrition	4
ANSC 625	Animal Diseases	4

Code	Title	Credits
Health and Environmental Issues Electives		
Recommended Courses		
BMS 730	Ethical Issues in Biomedical Science	4
ANSC 602	Animal Rights and Societal Issues	4
ANSC 750	Collaborative Farm Design and Development	4
ANSC 690	Livestock and Wildlife in Namibia: Challenges, Opportunities and Geography	4
ANTH 610	Medical Anthropology: Illness and Healing	4
BIOL 541W	Ecology	4
HMP 401	United States Health Care Systems [5]	4
HMP 501	Epidemiology and Community Medicine	4
SOC 635W	Medical Sociology	4
ANTH 660	Human Osteology	4

[5] Only one 400-level course may be taken to fulfill a Major Elective requirement.

Code	Title	Credits
Other Appropriate Courses		
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa	4
BIOL 706	Data Science with R for the Life Sciences	4
HMP 642	Health Economics	4
HMP 669	Human Behavior and the Public Health	4
PSYC 531	Psychobiology	4
ANSC 670	Exotic Companion Species Health and Management	4

BMS: MVS Capstone

The capstone explores areas of interest based on the integration of prior learning. The capstone requirement may be satisfied through a course, created work or product, or some form of experiential learning (e.g., honors thesis, mentored research project, or other special student activity). Students may take more than one capstone course. Capstone completion is never displayed on Degree Works; your advisor will certify capstone completion at the time of graduation. Students must have 90 credits or more when completing their capstone requirement. See your advisor for questions about capstones.

Code	Title	Credits
Approved BMS-MVS Capstone Courses		
BMS 702	Endocrinology	4
BMS 704	Pathologic Basis of Disease	4
BMS 711		4
BMS 712	Experiences in Applied Veterinary Diagnostics (4-credit minimum)	2
BMS 718	Mammalian Physiology	4
BMS 719	Host-Microbe Interactions	4
BMS 740	Human Microbiome	4
BMS 795	Investigations in Biomedical Science (4-credit minimum)	1-8

BMS 795W	Investigations in Biomedical Science (4-credit minimum)	1-8
BMS 799	Senior Thesis (4-credit minimum)	1-4
BMS 799H	Senior Honors Thesis (4-credit minimum)	1-4
BMCB 760	Pharmacology	4
BMCB 763	Biochemistry of Cancer	4
ANSC 605	Poultry Production and Health Management	4
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM)	4
BMCB 753	Cell Culture	5
INCO 790	Advanced Research Experience (4-credit minimum)	1-4
NUTR 750	Nutritional Biochemistry	4
Other 795 Investigations course in the biological sciences (4-credit minimum)		

For a Capstone experience not listed above, such as an internship, submit a Capstone Experience Approval form **prior** to beginning the experience.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing	4
Discovery Course		4
	Credits	**17**
Spring		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 404	General Chemistry II	4
MATH 424B	Calculus for Life Sciences	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
BMS 507 or ANSC 511	Human Anatomy and Physiology I or Animal Anatomy and Physiology I	4
BMCB 605	Principles of Cell Biology [1]	4
CHEM 651 & CHEM 653	Organic Chemistry I and Organic Chemistry Laboratory	5
Discovery Course		4
	Credits	**17**
Spring		
BMS 508 or ANSC 512	Human Anatomy and Physiology II or Animal Anatomy and Physiology II	4
CHEM 652 & CHEM 654	Organic Chemistry II and Organic Chemistry Laboratory	5
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory [1]	5
Discovery Course		4
	Credits	**18**
Third Year		
Fall		
BIOL 528	Applied Biostatistics I	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
PHYS 401	Introduction to Physics I	4
GEN 604	Principles of Genetics [1]	4
	Credits	**17**
Spring		
PHYS 402	Introduction to Physics II	4
Major Elective		4
Major Elective		4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
Major Elective (Capstone)		4
Major Elective		4
Discovery Course		4
Elective (any course)		4
	Credits	**16**
Spring		
Major Elective		4
Major Elective		4
Elective (any course)		4
	Credits	**12**
	Total Credits	**129**

[1] BMCB 605, BMS 503 & BMS 504, and GEN 604 may be taken in other semesters, but all should be completed by the end of Fall semester in junior year.

Student Learning Outcomes

Program Learning Outcomes

Core Knowledge

- Students will demonstrate an understanding of core knowledge in biochemistry, molecular biology, cell biology, genetics & biomedical sciences.

Quantitative Literacy, Inquiry & Analysis

- Students will be able to apply the scientific method to examine experimental evidence and draw informed conclusions.
- Students will be able to use graphs to represent scientific data.
- Students will be able to apply statistical methods to interpret scientific data.

Critical Thinking & Problem Solving

- Students will be able to use data to troubleshoot an unexpected outcome.
- Students will be able to apply core knowledge to critically interpret scientific data.

Written Communication

- Students will demonstrate written skills to communicate scientific knowledge and experimental data.

Oral Communication

- Students will be able to demonstrate oral presentation skills to communicate scientific knowledge and experimental data.

Biomedical Science: Medical and Veterinary Sciences option

- Students will be able to list the major organ systems in mammals and describe their basic structure and function.
- Students will be able to describe the differences between Gram-negative and Gram-positive bacteria.
- Students will be able to describe the structure and function of the major cellular organelles.
- Students will understand the principles of Mendelian genetics.
- Students will understand the pathogenesis of disease and effects on the major organ systems.
- Students will be able to describe the inter-relationships between health and disease, society, and the environment.

Biomedical Science Minor

https://www.unh.edu/program/minor/biomedical-science

Description

Students who wish to develop focused competencies in the broad area of the biomedical sciences can complement their major academic program with a minor in biomedical science (BMS).

Requirements

Academic policies related to Minors.

The minor consists of completing a minimum of 20 credits.

Code	Title	Credits
Required Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BMS 508	Human Anatomy and Physiology II	4
or ANSC 512	Animal Anatomy and Physiology II	
Select additional courses from the list below to complete 20 total credits for the minor. Note: some courses may have prerequisites.		
BMS 501	Microbes in Human Disease	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BMS 560 & BMS 561	Body Fluids and Body Fluids Laboratory	4
BMS 602 & BMS 603	Pathogenic Microbiology and Pathogenic Microbiology Laboratory	5
BMS 610	Biomedical Lab Management	4
BMS 623	Histology: Microscopic Cellular Structure and Function	4
BMS 635	Preceptorial in Prehospital Care	2
BMS 640	Phlebotomy Theory	2
BMS 644	Clinical Hematology	3
BMS 650	Molecular Diagnostics	4
BMS 655	Human and Animal Parasites	3
BMS 656	Immunohematology	3
BMS 658	Medical Biochemistry	3
BMS 702	Endocrinology	4
BMS 703	Infectious Disease and Health	4
BMS 704	Pathologic Basis of Disease	4
BMS 705	Immunology	3
BMS 706	Virology	3
BMS 711		4
BMS 712	Experiences in Applied Veterinary Diagnostics	2
BMS 718	Mammalian Physiology	4
BMS 719	Host-Microbe Interactions	4
BMS 720	Mycology, Parasitology, and Virology	3
BMS 730	Ethical Issues in Biomedical Science	4
BMS 740	Human Microbiome	4
BMCB 605	Principles of Cell Biology	4
BMCB 753	Cell Culture	5
GEN 704	Microbial Genetics and Genomics	5
GEN 717	Molecular Microbiology	5
HMP 501	Epidemiology and Community Medicine	4
NUTR 750	Nutritional Biochemistry	4

Community and Environmental Planning (CEP)

Community and Environmental Planning students have an appreciation for communities designed for people to live, work and play. Our students study a diverse and interconnected number of topics including perspectives in community development, fundamentals of land use planning, community economics, and natural resource conservation issues. If you want to help communities deal with problems associated with the intersection of our built and natural environments, such as economic development, transportation, affordable housing, green space and local agriculture, than a degree in Community and Environmental Planning may be the right fit for you.

https://colsa.unh.edu/natural-resources-environment

Programs

- Community and Environmental Planning Major (B.S.) (p. 403)
- Community Planning Minor (p. 406)

Faculty

Community and Environmental Planning Program Faculty

Community and Environmental Planning Major (B.S.)

https://www.unh.edu/program/bachelor-science/community-environmental-planning

Description

The Community and Environmental Planning (CEP) program is designed to provide students with the knowledge and skills to become effective community planners in the public or private sector. All of the courses are designed to give the student a diverse skill-set in planning for the sustainability of communities. CEP students are provided a solid planning background with planning courses covering local, state and regional planning topics and methods. CEP students also take foundational courses in natural resources, geographic information systems, economics, and statistics, as well as a political science course, and a social issues course. The internship requirement allows the planning student to apply their knowledge in the real world for instrumental hands-on experience. Semester in the City is also an option for the internship experience. CEP students are encouraged to focus their remaining hours

on skills that can enhance their CEP major such as a dual major, a minor, or study abroad.

Expected CEP Student Outcomes:

- The foundational education in planning, natural resources, economics and sustainability.
- The fundamental values of diversity, equity, justice, and protection of community and the environment.
- The ability to assess, discuss, and engage others in the problems and potential solutions associated with impacts of land use changes.
- The ability to work with community members and professionals in the design and implementation of community improvements in building and transportation while protecting natural and built resources.

Students may go on to work in the community development or community planning departments in local communities. They may also choose to work in regional planning agencies, or with a state or federal office. Other options include the private sector, such as architectural or development companies, or the non-profit sector, such as with community development corporations or conservation groups. The American Planning Association provides a certification process for the planning profession (American Institute of Certified Planners) after several years of planning experience. Students may also choose to go on to graduate studies in Community and Environmental Planning, Natural Resources Management, Public Administration, or a related field.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Courses with the subject prefix CEP must be completed with a grade of C- or above. Excluding CEP 794 which is credit/fail grading.
- All students must complete the 13 required core courses listed below, and select one foundational elective and two advanced electives for a total of 16 courses for the major.

Code	Title	Credits
Required Core Courses		
CEP 415	Community Development Perspectives (Discovery Course)	4
CEP 508	Applied Community Development	4
CEP 614	Fundamentals of Planning	4
CEP 627	Community Economics	4
CEP 672	Fundamentals of Real Estate	4
or CEP 673	Green Real Estate	
CEP 777	Topics in Community Planning (Capstone Course)	4
CEP 794	Community and Environmental Planning Internship	4
NR 411	Environmental and Resource Economics Perspectives	4
or ECON 402	Principles of Economics (Micro)	
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
or NR 437	Principles of Sustainability	
or SUST 401	Exploring Sustainability	
NR 602	Natural Resources and Environmental Policy	4
NR 658	Introduction to Geographic Information Systems	4
or ESCI 777	GIS for Earth & Environmental Sciences	
NR 724	Resolving Environmental Conflicts	4
BIOL 528	Applied Biostatistics I	4
or PSYC 402	Statistics in Psychology	
or SOC 402	Statistics	
Electives		
Foundational Electives		
Select one course from the following:		4
NR 507	Introduction to our Energy System and Sustainable Energy	
NR 572	Introduction to Natural Resource Economics	
NR 606	International Energy Topics	
SW 525	Social Welfare Policy: History of Social and Economic Justice	
SOC 450	Contemporary Social Problems	
SOC 565	Environment and Society	
GEOG 560	Natural Hazards and Human Disasters	
GEOG 581	Society, Environment and Justice	
RMP 490	Recreation & Tourism in Society	
POLT 500	American Public Policy	
POLT 502	State and Local Government	
POLT 595	Smart Politics	
Advanced Electives		
Select two courses from the following:		8
CEP 673	Green Real Estate [1]	
or CEP 672	Fundamentals of Real Estate	
NR 608	Economics of Sustainability	
NR 720	International Environmental Politics and Policies for the 21st Century	
NR 757	Remote Sensing of the Environment	
NR 767W	Social Impact Assessment	
NR 784	Sustainable Living - Global Perspectives	
NR 785	Systems Thinking for Sustainable Solutions	
NR 787	Advanced Topics in Sustainable Energy	
RMP 724	Research, Evaluation, and Data-Driven Decisions	
RMP 776	Human Dimensions of Natural Environments	
AGFS 620	Food Systems & Community Resilience	
AGFS 690	Agricultural and Food Policy	
SW 660	Exploring Issues in Housing and Homelessness	
PPOL 712	Strategies for Policy Impact	
Total Credits		**64**

[1] May be taken as an elective if not taken as a core course.

Additional Information

CEP students are encouraged to have a study away/abroad experience, a dual degree, a minor, or focused area of study which add value to the CEP degree. Consider the following to complete the minimum of 128 credits:

- Semester in the City (if you have not done this in the CEP major)
- EcoQuest New Zealand (16 credits in electives - must qualify with EcoQuest)
- Study Away
- Study Abroad
- Minor as approved by the minor program
- Courses to round out a focus area. *It is recommended that you choose upper level courses in NR and EREC.*

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year

Fall		Credits
CEP 415	Community Development Perspectives	4
NR 435 or NR 437 or SUST 401	Contemporary Conservation Issues and Environmental Awareness or Principles of Sustainability or Exploring Sustainability	4
NR 411 or ECON 402	Environmental and Resource Economics Perspectives or Principles of Economics (Micro)	4
ENGL 401	First-Year Writing	4
	Credits	**16**

Spring		
Choose 1 Foundational Elective		
NR 507 or NR 572 or NR 606 or SW 525 or SOC 450 or SOC 565 or GEOG 560 or GEOG 581 or RMP 490 or POLT 500 or POLT 502 or POLT 595	Introduction to our Energy System and Sustainable Energy or Introduction to Natural Resource Economics or International Energy Topics or Social Welfare Policy: History of Social and Economic Justice or Contemporary Social Problems or Environment and Society or Natural Hazards and Human Disasters or Society, Environment and Justice or Recreation & Tourism in Society or American Public Policy or State and Local Government or Smart Politics	4
Choose any three Discovery required courses. Consider the following:		
Discovery Biological Science with Lab		4
Discovery Humanities		4
Inquiry Course		4
	Credits	**16**

Second Year

Fall		
CEP 614	Fundamentals of Planning	4
NR 602	Natural Resources and Environmental Policy	4
BIOL 528 or SOC 402 or PSYC 402	Applied Biostatistics I or Statistics or Statistics in Psychology	4
Choose any remaining Discovery required course. Consider the following:		
Discovery Fine and Performing Arts		4
	Credits	**16**

Spring		
CEP 508	Applied Community Development	4
Elective		4
Choose any remaining two Discovery Course requirements. Consider the following:		
Discovery Physical Sciences		4
Discovery Environment, Technology & Society (if not completed)		4
	Credits	**16**

Third Year

Fall		
CEP 627	Community Economics	4
CEP 672 or CEP 673	Fundamentals of Real Estate or Green Real Estate	4
Elective		4
Choose any remaining Discovery required course. Consider the following:		
Discovery Historical Perspectives		4
May consider CEP 794 internship or courses toward a minor.		
	Credits	**16**

Spring		
NR 724	Resolving Environmental Conflicts	4
NR 658 or ESCI 777	Introduction to Geographic Information Systems or GIS for Earth & Environmental Sciences	4
ESCI 777 is currently offered in fall - switch semester with Discovery Historical Perspectives course if needed		
Choose one Advanced Elective (note that some of these have prerequisites)		
CEP 673 or CEP 672 or NR 608 or NR 720 or NR 757 or NR 767W or NR 784 or NR 785 or NR 787 or RMP 724 or RMP 776 or AGFS 620 or AGFS 690 or SW 660 or PPOL 712	Green Real Estate (if not taken as core) or Fundamentals of Real Estate or Economics of Sustainability or International Environmental Politics and Policies for the 21st Century or Remote Sensing of the Environment or Social Impact Assessment or Sustainable Living - Global Perspectives or Systems Thinking for Sustainable Solutions or Advanced Topics in Sustainable Energy or Research, Evaluation, and Data-Driven Decisions or Human Dimensions of Natural Environments or Food Systems & Community Resilience or Agricultural and Food Policy or Exploring Issues in Housing and Homelessness or Strategies for Policy Impact	4
Choose any remaining Discovery required course. Consider the following:		
Discovery World Cultures		4

May consider CEP 794 internship or courses toward a minor.		
	Credits	**16**
Fourth Year		
Fall		
Choose one Advanced Elective (note that some of these have prerequisites)		
NR 608 or NR 720 or NR 757 or NR 767W or NR 784 or NR 785 or NR 787 or RMP 724 or RMP 776 or AGFS 620 or AGFS 690 or SW 660 or PPOL 712	Economics of Sustainability or International Environmental Politics and Policies for the 21st Century or Remote Sensing of the Environment or Social Impact Assessment or Sustainable Living - Global Perspectives or Systems Thinking for Sustainable Solutions or Advanced Topics in Sustainable Energy or Research, Evaluation, and Data-Driven Decisions or Human Dimensions of Natural Environments or Food Systems & Community Resilience or Agricultural and Food Policy or Exploring Issues in Housing and Homelessness or Strategies for Policy Impact	4
CEP 794	Community and Environmental Planning Internship	4
CEP 794 internship may be taken any semester -- including summer -- from sophomore through senior year		
Elective		4
Elective		4
	Credits	**16**
Spring		
CEP 777	Topics in Community Planning	4
Elective		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**128**

Student Learning Outcomes

Community Planning and Development Foundational Knowledge

- The foundational education in planning, community and economic development, natural resources, and sustainability.

Community Engagement

- The skills to engage others in the problems and potential solutions associated with community needs and the impacts of land use changes.

Data Collection and Interpretation

- The capability to gather and evaluate data on community issues and recommend planning and community development solutions.

Design and Implementation of Plans and Polices

- The ability to work with community members and professionals in the development and implementation of public policy, plans and associated community improvements while protecting natural and built resources.

Community Planning Minor

https://www.unh.edu/program/minor/community-planning

Description

Planning is a multidisciplinary profession that requires an understanding of social, economic, and environmental connections to land use change. Students may supplement their major with the minor in community planning to enhance their skills to work with communities for improved sustainability.

Requirements

Academic policies related to Minors.

- Students are required to complete five courses (20 credits) for the minor.
- A grade of C- or better is required in coursework for the minor.

Code	Title	Credits
Required Core Courses		
CEP 415	Community Development Perspectives	4
CEP 508	Applied Community Development	4
CEP 614	Fundamentals of Planning	4
Electives		
Select two courses from the following:		8
CEP 627	Community Economics	
CEP 673	Green Real Estate	
or CEP 672	Fundamentals of Real Estate	
CEP 777	Topics in Community Planning [1]	
NR 602	Natural Resources and Environmental Policy	
NR 658	Introduction to Geographic Information Systems	
NR 720	International Environmental Politics and Policies for the 21st Century	
NR 724	Resolving Environmental Conflicts	
NR 784	Sustainable Living - Global Perspectives	
NR 785	Systems Thinking for Sustainable Solutions	
NR 787	Advanced Topics in Sustainable Energy	
Total Credits		**20**

[1] This is the Capstone course for the CEP Major.

Student Learning Outcomes

Program Learning Outcomes

Community Planning and Development Foundational Knowledge

- A foundational understanding of issues related to the intersection of planning, community and economic development, natural resources, and sustainability.

Data Collection and Interpretation

- The capability to gather and evaluate data on community issues and recommend planning and community development solutions.

Practical Skill-building for Community Planning and Development

- The skills to support the design and implementation of public policy, plans, and associated community improvements while protecting natural and built resources.

Diagnostic Science

Programs

- Diagnostic Science Major (B.S.) (p. 407)
- Diagnostic Science Major: Medical Laboratory Science Option (B.S.) (p. 408)

Diagnostic Science Major (B.S.)

https://www.unh.edu/program/bachelor-science/diagnostic-science

Description

The Diagnostic Science program aims to develop the next generation of diagnostic professionals who demonstrate innovation and compassion to advance healthcare. Through interdisciplinary education and a commitment to critical inquiry, our graduates will become pioneers in identifying and solving complex health challenges, driving better outcomes for individuals and communities.

This is the pre-clinical option for students who wish to have a background in diagnostic science but whose goals are to work in roles outside of the clinical laboratory.

Graduates from this program are prepared for a variety of careers due to the clinical laboratory and quality control/assurance principles learned through this curriculum. Additionally, the knowledge gained in quality control and assurance provides graduates of this option with ample skills needed in varying industries.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
Foundation Courses		
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BIOL 528	Applied Biostatistics I	4
Bioscience Core Courses		
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BIOL 411	Introductory Biology: Molecular and Cellular	4
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
GEN 604	Principles of Genetics	4
Diagnostic Science Core Courses		
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
BMS 560 & BMS 561	Body Fluids and Body Fluids Laboratory	4
BMS 602 & BMS 603	Pathogenic Microbiology and Pathogenic Microbiology Laboratory	5
BMS 642 & BMS 643	Clinical Immunology and Serology and Clinical Serology Laboratory	4
BMS 644 & BMS 645 & BMS 646	Clinical Hematology and Clinical Hematology Laboratory and Clinical Hemostasis	6
BMS 650	Molecular Diagnostics	4
BMS 656 & BMS 657	Immunohematology and Blood Banking Laboratory	4
BMS 658 & BMS 659	Medical Biochemistry and Clinical Chemistry Laboratory	5
BMS 720 & BMS 721	Mycology, Parasitology, and Virology and Mycology, Parasitology, and Virology Laboratory	5
Major Electives		
Select a minimum of 16 credits from the below list of approved electives for the major.		16
Total Credits		**97**

Code	Title	Credits
Approved Elective Courses		
BMS 610	Biomedical Lab Management [1]	4
BMS 623	Histology: Microscopic Cellular Structure and Function	4
BMS 640	Phlebotomy Theory [1]	2
BMS 641	Phlebotomy Clinical Internship	1
BMS 702	Endocrinology	4
BMS 704	Pathologic Basis of Disease	4
BMS 711		4
BMS 719	Host-Microbe Interactions	4
BMS 740	Human Microbiome	4
BMS 749	Case Studies in Hematology and Immunology	2
BMS 750	Case Studies in Microbiology	2
BMS 751	Advanced Clinical Microbiology Internship [2]	5
BMS 752	Advanced Hematology Internship [2]	5
BMS 753	Advanced Immunohematology Internship [2]	5
BMS 754	Advanced Clinical Chemistry Internship [2]	5
BMS 790	Undergraduate Teaching Experience [3]	1
BMS 799H	Senior Honors Thesis [4]	1
BMS 799	Senior Thesis [4]	1
BMCB 760	Pharmacology	4
GEN 706	Human Genetics	4
SOC 635W	Medical Sociology	4

1. Required for Clinical Internship Courses.
2. Students must complete this course to be eligible for MLS (ASCP) examination.
3. To be considered a capstone, students must complete two semesters of this course after acquiring 90 credits and senior status.
4. Students must complete a minimum of 4 credits for this course to count as an elective.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
BMS 507	Human Anatomy and Physiology I	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing	4
Discovery Course		4
	Credits	**17**
Spring		
BMS 508	Human Anatomy and Physiology II	4
CHEM 404	General Chemistry II	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 528	Applied Biostatistics I	4
	Credits	**16**
Second Year		
Fall		
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
GEN 604	Principles of Genetics	4
Discovery Course (Writing Intensive)		4
Discovery Course		4
	Credits	**17**
Spring		
BMS 602 & BMS 603	Pathogenic Microbiology and Pathogenic Microbiology Laboratory	5
BMS 560 & BMS 561	Body Fluids and Body Fluids Laboratory	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
Major Elective		2-4
	Credits	**16-18**
Third Year		
Fall		
BMS 650	Molecular Diagnostics	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
BMS 644 & BMS 645 & BMS 646	Clinical Hematology and Clinical Hematology Laboratory and Clinical Hemostasis	6
	Credits	**15**
Spring		
BMS 642 & BMS 643	Clinical Immunology and Serology and Clinical Serology Laboratory	4
BMS 720 & BMS 721	Mycology, Parasitology, and Virology and Mycology, Parasitology, and Virology Laboratory	5
Major Elective		4
Discovery Course		4
	Credits	**17**
Fourth Year		
Fall		
BMS 658 & BMS 659	Medical Biochemistry and Clinical Chemistry Laboratory	5
BMS 656 & BMS 657	Immunohematology and Blood Banking Laboratory	4
Major Elective		4
Discovery Course		4
	Credits	**17**
Spring		
Major Elective		4-5
Elective		4-5
Elective		4-5
Elective		4-5
	Credits	**16-20**
	Total Credits	**131-137**

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate an understanding of foundational knowledge in biochemistry, cell biology, genetics, and clinical science.
- Apply scientific and statistical methods to critically evaluate and draw conclusions from experimental evidence or clinical data.
- Use evidence-based strategies to troubleshoot unexpected experimental outcomes or problem solve in clinical scenarios.
- Evaluate the reliability of laboratory results using pertinent quality control and quality assurance data.
- Demonstrate effective written and verbal communication skills to effectively communicate scientific and clinical data.
- Correlate clinical and laboratory data to patient diagnosis and prognosis.
- Perform procedures routinely completed in clinical laboratories within acceptable limits of precision and accuracy.
- Exhibit attitudes, behaviors, and ethics expected of entry-level medical professionals.

Diagnostic Science Major: Medical Laboratory Science Option (B.S.)

https://www.unh.edu/program/bachelor-science/diagnostic-science-medical-laboratory-science

Description

The Diagnostic Science program aims to develop the next generation of diagnostic professionals who demonstrate innovation and compassion to advance healthcare. Through interdisciplinary education and a commitment to critical inquiry, our graduates will become pioneers in identifying and solving complex health challenges - driving better outcomes for individuals and communities.

This degree option is designed for students to be eligible for the American Society for Clinical Pathology (ASCP) Board of Certification Medical Laboratory Scientist generalist examination.

Additionally, students complete the medical laboratory science internship courses in their final semester at an affiliated clinical laboratory. This pathway ensures the student completes all required electives and credit requirements needed for graduation.

The Medical Laboratory Science (MLS) option involves coursework and an applied learning experience at an affiliated hospital laboratory.

The sequence of courses offered in this option fulfills programmatic accreditation requirements outlined by the National Accrediting Agency for Clinical Laboratory Science.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
Foundation Courses		
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BIOL 528	Applied Biostatistics I	4
Bioscience Core Courses		
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BIOL 411	Introductory Biology: Molecular and Cellular	4
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
GEN 604	Principles of Genetics	4
Diagnostic Science Core Courses		
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
BMS 560 & BMS 561	Body Fluids and Body Fluids Laboratory	4
BMS 602 & BMS 603	Pathogenic Microbiology and Pathogenic Microbiology Laboratory	5
BMS 642 & BMS 643	Clinical Immunology and Serology and Clinical Serology Laboratory	4
BMS 644 & BMS 645 & BMS 646	Clinical Hematology and Clinical Hematology Laboratory and Clinical Hemostasis	6
BMS 650	Molecular Diagnostics	4
BMS 656 & BMS 657	Immunohematology and Blood Banking Laboratory	4
BMS 658 & BMS 659	Medical Biochemistry and Clinical Chemistry Laboratory	5
BMS 720 & BMS 721	Mycology, Parasitology, and Virology and Mycology, Parasitology, and Virology Laboratory	5
Medical Laboratory Science Option Courses		
BMS 610	Biomedical Lab Management [1]	4
BMS 640	Phlebotomy Theory [1]	2
BMS 751	Advanced Clinical Microbiology Internship [2]	4
BMS 752	Advanced Hematology Internship [2]	4
BMS 753	Advanced Immunohematology Internship [2]	4
BMS 754	Advanced Clinical Chemistry Internship [2]	4
Total Credits		**103**

Code	Title	Credits
Approved Elective Courses		
BMS 623	Histology: Microscopic Cellular Structure and Function	4
BMS 641	Phlebotomy Clinical Internship	1
BMS 702	Endocrinology	4
BMS 704	Pathologic Basis of Disease	4
BMS 711		4
BMS 719	Host-Microbe Interactions	4
BMS 740	Human Microbiome	4
BMS 749	Case Studies in Hematology and Immunology	2
BMS 750	Case Studies in Microbiology	2
BMS 790	Undergraduate Teaching Experience [3]	1
BMS 799H	Senior Honors Thesis [4]	1
BMS 799	Senior Thesis [4]	1
BMCB 760	Pharmacology	4
GEN 706	Human Genetics	4
SOC 635W	Medical Sociology	4

1. Students are required to take this course to be eligible for the clinical internship.
2. Students must complete this course to be eligible for Medical Laboratory Science (ASCP) examination.
3. To be considered a capstone, students must complete two semesters of this course after acquiring 90 credits and senior status.
4. Students must complete a minimum of 4 credits for this course to count as an elective.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
BMS 507	Human Anatomy and Physiology I	4
ENGL 401	First-Year Writing	4
CHEM 403	General Chemistry I	4
Discovery course		4
	Credits	**17**
Spring		
BMS 508	Human Anatomy and Physiology II	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 404	General Chemistry II	4
BIOL 528	Applied Biostatistics I	4
	Credits	**16**

Second Year		
Fall		
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
GEN 604	Principles of Genetics	4
Discovery Course (Writing Intensive)		4
Discovery Course		4
	Credits	**17**
Spring		
BMS 602 & BMS 603	Pathogenic Microbiology and Pathogenic Microbiology Laboratory	5
BMS 560 & BMS 561	Body Fluids and Body Fluids Laboratory	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BMS 640	Phlebotomy Theory	2
	Credits	**16**
Third Year		
Fall		
BMS 650	Molecular Diagnostics	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
BMS 644 & BMS 645 & BMS 646	Clinical Hematology and Clinical Hematology Laboratory and Clinical Hemostasis	6
	Credits	**15**
Spring		
BMS 642 & BMS 643	Clinical Immunology and Serology and Clinical Serology Laboratory	4
BMS 720 & BMS 721	Mycology, Parasitology, and Virology and Mycology, Parasitology, and Virology Laboratory	5
BMS 610	Biomedical Lab Management	4
Discovery Course		4
	Credits	**17**
Fourth Year		
Fall		
BMS 658 & BMS 659	Medical Biochemistry and Clinical Chemistry Laboratory	5
BMS 656 & BMS 657	Immunohematology and Blood Banking Laboratory	4
Major Elective (BMS 749 and 750 recommended for Medical Laboratory Science option students)		4
Discovery		4
	Credits	**17**
Spring		
BMS 751	Advanced Clinical Microbiology Internship	4
BMS 752	Advanced Hematology Internship	4
BMS 753	Advanced Immunohematology Internship	4
BMS 754	Advanced Clinical Chemistry Internship	4
	Credits	**16**
	Total Credits	**131**

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate an understanding of foundational knowledge in biochemistry, cell biology, genetics, and clinical science
- Apply scientific and statistical methods to critically evaluate and draw conclusions from experimental evidence or clinical data
- Use evidence-based strategies to troubleshoot unexpected experimental outcomes or problem solve in clinical scenarios
- Evaluate the reliability of laboratory results using pertinent quality control and quality assurance data
- Demonstrate effective written and verbal communication skills to effectively communicate scientific and clinical data
- Correlate clinical and laboratory data to patient diagnosis and prognosis
- Perform procedures routinely completed in clinical laboratories within acceptable limits of precision and accuracy.
- Exhibit attitudes, behaviors, and ethics expected of entry-level medical professionals
- Describe essential principles of education and laboratory management.
- Develop an awareness of the need for continuing education amongst medical laboratory professionals

EcoGastronomy

EcoGastronomy is the interdisciplinary study of how food can nourish both people and planet, while cultivating a food system that is equitable, regenerative, and resilient. This program blends culinary arts and hospitality with ecological and social responsibility, recognizing that every meal affects both human and environmental health and wellbeing.

The EcoGastronomy program prepares students for professions within our rapidly evolving food community—from farm to fork to nutrition and health outcomes—where ever-greater integration of agriculture, food, and nutrition requires a broad perspective and a specific blend of skills and knowledge.

Curriculum and International Experience

The courses in the program are multidisciplinary and are designed to integrate UNH strengths in sustainable agriculture, culinary arts, hospitality, and nutrition. This unique academic program emphasizes the interdisciplinary, international, and experiential knowledge that connects these fields. The program is experiential by requiring students to work in the field growing food, in the kitchen preparing food, and developing the skills associated with both. Students experience the local food cultures and get firsthand experience on the issues of food security locally, regionally, and globally. Students who declare the dual major in EcoGastronomy spend a semester abroad in Ascoli Piceno, Italy, (spring, summer or fall semester) and complete courses related to the Italian food system - including culture, history, philosophy, and production. The ECOG 701 EcoGastronomy Capstone, taken during the senior year, provides students the opportunity to synthesize, apply, and reflect on knowledge gained throughout the program's coursework.

To declare a dual major students must have a cumulative grade-point average of 2.5 and have declared a disciplinary major. All required EcoGastronomy coursework must be completed with a grade of C or better.

Programs

- EcoGastronomy (Dual Major) (p. 411)

Faculty

EcoGastronomy Program Faculty

EcoGastronomy (Dual Major)

https://www.unh.edu/program/dual-major/ecogastronomy

Description

EcoGastronomy is the study of how food can nourish both people and the planet, cultivating a food system that is regenerative, just, and resilient. This program blends culinary arts with ecological and social responsibility, recognizing that every meal is part of a larger system affecting planetary and human health and wellbeing. The **Dual Major in EcoGastronomy** integrates UNH strengths in sustainable agriculture, culinary arts, hospitality, and nutrition. EcoGastronomy offers a unique academic program emphasizing the interdisciplinary, international, and experiential knowledge that connects these fields.

The EcoGastronomy Dual Major is a collaboration between the University of New Hampshire's College of Life Sciences and Agriculture and the Peter T. Paul College of Business and Economics.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes, if primary major is a Bachelor of Arts

Declared Primary Major

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

EcoGastronomy Dual Major Requirements

Code	Title	Credits
Required Courses		
ECOG 401	Introduction to Ecogastronomy	4
AGFS 405	Sustainable Agriculture and Food Production	4
NUTR 400	Nutrition in Health and Well Being	4
NUTR 403	Culinary Arts Skills Development	4
or HMGT 405	Introduction to Food and Service Management	
NUTR 686	UNH-in-Italy Study Abroad [1]	0
ECOG 701	EcoGastronomy Capstone [2]	2-4
Elective		
Select one course from the following:		4
ANSC 602	Animal Rights and Societal Issues	
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM)	
AGFS 690	Agricultural and Food Policy	
HIST 618	American Environmental History	
HMGT 771	International Wine and Beverage	
HMGT 570	International Food and Culture	
MGT 662	Exploration in Entrepreneurial Management	
NR 602	Natural Resources and Environmental Policy	
NR 720	International Environmental Politics and Policies for the 21st Century	
NR 784	Sustainable Living - Global Perspectives	
NR 785	Systems Thinking for Sustainable Solutions	
NUTR 625	From Farm to the Italian Table	
NUTR 720	Community Nutrition	
NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	
AGFS 620	Food Systems & Community Resilience	
AGFS 679	Food Production Field Experience I	
SOC 665	Environmental Sociology	
ZOOL 610	Principles of Aquaculture	
MEFB 772	Fisheries Biology: Conservation and Management	
Total Credits		**22-24**

1 NUTR 686 UNH-in-Italy Study Abroad is a variable credit course. ECOG students must complete at least 8 credits of study abroad.

2 Satisfies the capstone requirement of the Discovery Program for the EcoGastronomy major.

Student Learning Outcomes

Program Learning Outcomes

- Students will understand and be able to communicate the interconnected nature of the food system, taking into account the social, political, ethical, environmental, economic, and social justice issues that are intertwined in the system.
- Students will gain practical understanding of food system sustainability by engaging in experiential education opportunities.
- Students will be able to speak fluently in the language of sustainable food systems.
- Students will effectively analyze and evaluate the full lifecycle of a food, or food product, by identifying and applying reliable information.
- Students will demonstrate effective oral communication skills.
- Students will demonstrate effective written communication skills.
- Students will demonstrate effective presentation skills.

Environmental and Resource Economics (EREC)

Programs

- Environmental and Resource Economics Minor (p. 411)

Environmental and Resource Economics Minor

https://www.unh.edu/program/minor/environmental-resource-economics

Description

The Environmental and Resource Economics minor aims to provide students majoring in other disciplines with an understanding of

environmental and resource economics, and their uses in personal, social, business and government decision-making. Students learn how to apply economic analyses in evaluating environmental and resource problems, identifying their causes and examining alternative solutions. The minor also offers courses that teach techniques useful for decision making by local and regional communities. Students also obtain skills in the management of agricultural and natural-resource business firms.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits) as outlined below.

Code	Title	Credits
Required Courses		
NR 411	Environmental and Resource Economics Perspectives [1]	4
or ECON 402	Principles of Economics (Micro)	
Electives		
Select a minimum of four courses from the following:		16
NR 572	Introduction to Natural Resource Economics	
NR 602	Natural Resources and Environmental Policy	
or AGFS 690	Agricultural and Food Policy	
NR 608	Economics of Sustainability	
NR 643	Economics of Forestry	
NR 708W	Environmental Economics	
NR 795	Investigations	
ANSC 548	Agricultural Business Management	
CEP 627	Community Economics	
ECON 706	Economics of Climate Change	
Total Credits		**20**

[1] NR 411 cannot be taken for credit if credit has been earned for ECON 402.

Environmental Conservation and Sustainability

Mission of the ECS Major

Graduates of the environmental conservation and sustainability major understand the complexity of social-ecological systems and meet environmental challenges in innovative ways. ECS students understand ecological principles and comprehend the connections between natural resource and social systems (history, economics,law, policy, international perspectives). They integrate scientific information and human values and articulate problems in ways that point to solutions leading to a sustainable future.

ECS graduates have the theoretical, methodological, technical, and practical skills necessary to solve complex problems. They work collaboratively and across disciplinary boundaries and at all scales from the local to the international. Their critical thinking and communication skills allow them to serve as liaisons among diverse interest groups and to design, implement, and facilitate policy and action toward a sustainable future.

ECS graduates are environmental citizens, sustainability advocates, and leaders for constructive change. They typically serve as policy analysts, sustainability officers, resource managers, journalists, scientists, and teachers in business, non-profit organizations, and government agencies, including the Peace Corps and Ameri-Corps. Many ECS graduates attend graduate or professional programs following graduation.

https://colsa.unh.edu/natural-resources-environment

Programs

- Environmental Conservation and Sustainability Major (B.S.) (p. 412)
- Environmental Conservation and Sustainability Minor (p. 415)

Faculty

Environmental Conservation and Sustainability Program Faculty

Environmental Conservation and Sustainability Major (B.S.)

https://www.unh.edu/program/bachelor-science/environmental-conservation-sustainability

Description

The ECS major curriculum is comprised of core requirements providing integrative courses in both environmental conservation and sustainability, along with a foundation in biology, ecology, physical and social science, and the basic tools and skills applied to problem solving. These core requirements are typically fulfilled in the first two years. Beginning in their junior year, ECS students, in consultation with their advisers, create a course focus area based on an ecological system or natural resource of their choosing. The focus area provides advanced study in ecology and natural resources; social sciences; tools, skills, and/or natural history and should reflect the student's interests and future goals. Additionally, each ECS student completes a practicum experience and a capstone option.

The ECS major provides the opportunity for students to gain a common foundation of knowledge and skills emphasizing integration and critical thinking, while allowing for sufficient flexibility to pursue their interests and passions within a large and complex field of study. The design of the curriculum will allow each student at least four, and as many as six, free electives, which they may fulfill as they choose. Many students pursue international experiences, such as the UNH EcoQuest program in New Zealand, add a minor or dual degree (such as the dual degree in global studies), and/or pursue research opportunities with our faculty or through another of UNH's undergraduate research opportunity programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A minimum grade of C- is required in coursework for the major.

Code	Title	Credits
Core Requirements		
Foundational Courses:		
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
NR 437	Principles of Sustainability	4
Natural Science:		
Biology:		8
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	
NR 439	Environmental Biology	
Ecological Principles: Select one of the following		4
BIOL 541W	Ecology	
NR 527	Forest Ecology	
AGFS 502	Agroecology	
Physical Science: Select one of the following		4
NR 403	Introduction to Environmental Science	
CHEM 403	General Chemistry I	
CHBE 410	Energy and Environment	
ESCI 409	Geology and the Environment	
CEE 520	Environmental Pollution and Protection: A Global Context	
PHYS 401	Introduction to Physics I	
Social Science:		
Resource Economics:		4
NR 411	Environmental and Resource Economics Perspectives	
Environmental Ethics and Values: Select one of the following		4
NR 784	Sustainable Living - Global Perspectives	
SOC 565	Environment and Society	
Natural Resources Policy: Select one of the following		4
NR 602	Natural Resources and Environmental Policy	
NR 662	Environmental Policy, Planning and Sustainability in New Zealand	
Essential Tools and Skills:		
Field Methods:		2
NR 415	Natural Resources Field Methods	
Statistics: Select one of the following		4
BIOL 528	Applied Biostatistics I	
SOC 402	Statistics	
Geospatial Analysis: select one of the following		4
NR 658	Introduction to Geographic Information Systems	
ESCI 777	GIS for Earth & Environmental Sciences	
Writing Skills: Select one of the following		4
ENGL 502	Professional and Technical Writing	
ENGL 503	Persuasive Writing	
Presentation Skills: Select one of the following		4
NR 508	Communicating Science	
CMN 500	Public Speaking	
THDA 522	Storytelling, Story Theatre, and Involvement Dramatics	
THDA 583	Introduction to Puppetry	
THDA 624	Theatre for Young Audiences	
Focus Area		
Select seven total courses to create a focus area addressing an environmental issue, ecological system, or natural resource (see below) [1]		28
Ecology and Natural Resources:		
Select one to four courses: no more than one course may be at the 400 or 500 level. Additional courses must be at the 600 or 700 levels.		
ESCI 405	Global Environmental Change	
NR 433	Wildlife Ecology	
NR 501	Studio Soils	
NR 504	Freshwater Resources	
NR 640	Wildlife Population Ecology	
NR 642	Introduction to Biogeography	
NR 650	Principles of Conservation Biology	
NR 660	Ecology and Biogeography of New Zealand	
NR 661	Restoration Ecology and Ecosystem Management in New Zealand	
NR 663	Applied Directed Research in New Zealand	
NR 664	Conservation Genetics and Applied Evolution	
MEFB 628	Marine Invertebrate Evolution and Ecology	
MEFB 674	Ecology and Marine Environment	
AGFS 760W	Integrated Pest Management	
MEFB 702	Sustainable Marine Fisheries	
MEFB 725	Marine Ecology	
MEFB 747	Aquatic Plants in Restoration/Management	
MEFB 755	Biological Oceanography	
MEFB 772	Fisheries Biology: Conservation and Management	
NR 706	Soil Ecology	
NR 730	Terrestrial Ecosystems	
NR 734	Tropical Ecology	
NR 743	Addressing Arctic Challenges	
NR 744	Biogeochemistry	
NR 751	Aquatic Ecosystems	
NR 761	Environmental Soil Chemistry	
NR 765	Community Ecology	
NR 782	Forest Health in a Changing World	
ZOOL 708	Stream Ecology	
ZOOL 726	Conservation Behavior	
Social Sciences		
Select two to five courses: no more than one course may be at the 400 or 500 level. Additional courses must be at the 600 or 700 levels.		
CEP 415	Community Development Perspectives	
TOUR 400	Introduction to Tourism	
CEP 508	Applied Community Development	
NR 507	Introduction to our Energy System and Sustainable Energy	
NR 572	Introduction to Natural Resource Economics	
AGFS 690	Agricultural and Food Policy	
ANTH 695	Globalization and Global Population Health	
CEP 614	Fundamentals of Planning	
CEP 627	Community Economics	
CEP 673	Green Real Estate	
ECON 605	Intermediate Microeconomic Analysis	
ECON 645	International Economics	
HIST 618	American Environmental History	
GEOG 673	From Political Ecology to Climate Justice	
NR 606	International Energy Topics	
NR 608	Economics of Sustainability	
NR 643	Economics of Forestry	
NR 662	Environmental Policy, Planning and Sustainability in New Zealand	
SOC 665	Environmental Sociology	
SOC 693	Global Change and Social Sustainability	
ECON 706	Economics of Climate Change	
MARI 705	Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy	
NR 708W	Environmental Economics	
NR 724	Resolving Environmental Conflicts	
NR 720	International Environmental Politics and Policies for the 21st Century	
NR 784	Sustainable Living - Global Perspectives	
NR 787	Advanced Topics in Sustainable Energy	
POLT 751	Comparative Environmental Politics and Policy	
SOC 730	Communities and the Environment	
Advanced Tools & Skills and Natural History		
Select at least one course		
BIOL 752	New England Mushrooms: a Field and Lab Exploration	
CEP 777	Topics in Community Planning	
NR 425	Field Dendrology	
NR 703	Watershed Water Quality Management	
NR 707	Environmental Modeling	
NR 712	Mammalogy	
NR 713	Quantitative Ecology	
NR 729	Silviculture	
NR 745	Forest Management	
NR 749	Forest Inventory and Modeling	
NR 757	Remote Sensing of the Environment	

NR 759	Digital Image Processing for Natural Resources	
NR 760	Geographic Information Systems in Natural Resources	
NR 785	Systems Thinking for Sustainable Solutions	
NR 767W	Social Impact Assessment	
SOC 601	Methods of Social Research	
ZOOL 542	Ornithology	
Senior Capstone Options		
The ECS major capstone experience may be filled by any one (1) of the following options:		4
Option 1:		
NR 786	Leadership for Sustainability	
or NR 785	Systems Thinking for Sustainable Solutions	
Option 2: Both seminars must be scheduled. At least one must be taken in the senior year.		
NR 753 & NR 754	Sustainability as Abundance and Sense of Place	
Option 3:		
NR 663	Applied Directed Research in New Zealand (NZ Directed projects, if taken in the senior year) [2]	
Option 4:		
Directed projects fulfilling one of the following: NR 799, McNair Research Theses, Hamel Center Programs (IROP, SURF USA, SURF Abroad, etc.) may be applied in consultation with the adviser and ECS program coordinator.		
Work Experience		
NR 600	Work Experience [3]	0

1 The focus area is based upon at least one course in the ecology and natural resources category, along with a combination of courses in the social sciences; tools, skills, and natural history categories; and any additional courses from the ecology and natural resources category reflecting the student's interests and future direction. Focus areas should be designed in close consultation with the adviser. Courses used to fulfill core requirements may not be used in the focus area.

2 If NR 663 Applied Directed Research in New Zealand is taken in the junior year or earlier, then one Critical Issues seminar (2cr) or Leadership for Sustainability must be taken in the senior year to fulfill the capstone requirement.

3 Each ECS major will engage in a practical experience reflecting their interests and goals. The choice of the experience will be made in conjunction with the adviser and may occur any time beginning with the sophomore year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology (Inquiry, Disc BS)	4
NR 435	Contemporary Conservation Issues and Environmental Awareness (Disc ETS)	4
NR 411	Environmental and Resource Economics Perspectives (or Discovery Course, not SS or ETS)	4
ENGL 401 or Discovery Course		4
	Credits	**16**
Spring		
NR 437	Principles of Sustainability	4
NR 439	Environmental Biology	4
NR 411	Environmental and Resource Economics Perspectives (or Discovery Course, not SS or ETS)	4
ENGL 401 or Discovery Course		4
	Credits	**16**
Second Year		
Fall		
NR 415	Natural Resources Field Methods	2
Ecological Principles [1]		4
Physical Science (Disc PS) [2]		4
Presentation Skills (possible Disc FPA) [2]		4
Practicum [3]		0
Elective		4
	Credits	**18**
Spring		
Statistics (Disc QR) [2]		4
Writing Skills (Univ. writing req.) [2]		4
NR 658	Introduction to Geographic Information Systems	4
NR 602 or Discovery Course		4
	Credits	**16**
Third Year		
Fall		
NR 602 or Discovery Course		4
Ethics/Values Requirement		4
Focus Area Courses		8
OR Electives		
OR any remaining Discovery or WI requirement		
OR Capstone [4]		
	Credits	**16**
Spring		
Focus Area Courses [5]		16
OR Electives		
OR any remaining Discovery or WI requirements		
OR Capstone [4]		
	Credits	**16**
Fourth Year		
Fall		
Capstone Requirement [5]		2-4
Focus Area Courses		12
OR Electives		
OR any remaining Discovery of WI requirements		
	Credits	**14-16**
Spring		
Capstone Requirement [5]		2-4
Focus Area Courses		12
OR Electives		
OR any remaining Discovery of WI requirements		
	Credits	**14-16**
	Total Credits	**126-130**

1 All choices for the Ecological Principles requirement ***except*** for AGFS 502 are fall courses.

[2] The Statistics, Physical Science, Writing Skills and Presentation Skills requirements may be taken in either the Fall or Spring Semester of the second year.

[3] Work experience, internship, etc may be scheduled any time beginning in the second year.

[4] One of the 2 credit capstone seminars may be taken in either the fall or spring of the junior year.

[5] One 2 credit seminar may be taken in each of the Fall and Spring semesters of the Senior Year OR NR 786 may be taken in the Fall semester of the Senior Year.

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Describe and explain the interactions among physical, biological, chemical, and human components of the environment;
- Formulate tests of environmental questions, acquire data, and apply scientific methods to answer these questions;
- Describe and explain the ecological and societal value of biodiversity, sustainability, and environmental stewardship;
- Use principles of ecology, economics, sustainability, and policy science to solve real-world environmental problems;
- Communicate effectively to peers within the environmental community and with audiences outside of the discipline.

Environmental Conservation and Sustainability Minor

https://www.unh.edu/program/minor/environmental-conservation-sustainability

Description

The minor in Environmental Conservation and Sustainability allows students from diverse majors across all UNH colleges to incorporate the theory and practice of sustainability into their 4-year baccalaureate studies. Students take required introductory courses in both conservation and sustainability and then select electives from ecology, social science and management, and a range of advanced topics. Students who participate in the EcoQuest Study Abroad Program may apply their courses to the minor.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits).

Code	Title	Credits
Required Courses		
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
NR 437	Principles of Sustainability	4
or SUST 401	Exploring Sustainability	
Ecology Course		
Select one course from the following:		4
AGFS 502	Agroecology	
BIOL 541W	Ecology	
NR 433	Wildlife Ecology	
NR 527	Forest Ecology	
NR 660	Ecology and Biogeography of New Zealand	
Social Science and Management Course		
Select one course from the following:		4
SUST 501	Sustainability in Action	
NR 507	Introduction to our Energy System and Sustainable Energy	
NR 602	Natural Resources and Environmental Policy	
NR 662	Environmental Policy, Planning and Sustainability in New Zealand	
CEP 627	Community Economics	
NR 786	Leadership for Sustainability	
Advanced Topics in Conservation and Sustainability Course		
Select one course from the following:		4
NR 606	International Energy Topics	
NR 650	Principles of Conservation Biology	
NR 661	Restoration Ecology and Ecosystem Management in New Zealand	
NR 708W	Environmental Economics	
NR 720	International Environmental Politics and Policies for the 21st Century	
NR 724	Resolving Environmental Conflicts	
SUST 750	Sustainability Capstone	
NR 767W	Social Impact Assessment	
NR 784	Sustainable Living - Global Perspectives	
NR 785	Systems Thinking for Sustainable Solutions	
NR 787	Advanced Topics in Sustainable Energy	
NR 795	Investigations [1]	
MARI 705	Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy	
MEFB 702	Sustainable Marine Fisheries	
Total Credits		**20**

[1] NR 795 Investigations requires working with an individual ECS faculty member on a special problem/issue.

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Formulate tests of environmental questions, acquire data, and apply scientific methods to answer these questions;
- Describe and explain the ecological and societal value of biodiversity, sustainability, and environmental stewardship;
- Use principles of ecology, economics, sustainability, and policy science to solve real-world environmental problems;
- Communicate effectively to peers within the environmental community and with audiences outside of the discipline.

Environmental Sciences

The College of Engineering and Physical Sciences (CEPS) and the College of Life Sciences and Agriculture (COLSA) jointly offer a bachelor of science degree in environmental sciences. The Program has four options, and specific course requirements for the major vary by option. The geosystems and hydrology options are both managed by the Department of Earth Sciences in CEPS, and the ecosystems and soil and watershed management options are both managed by the Department of Natural Resources and the Environment in COLSA.

Environmental sciences, an interdisciplinary field, focuses on the interaction of biological, chemical, and physical processes that shape our natural environment. Students graduating with a degree in environmental sciences will have an understanding of these interacting processes, the ability to communicate effectively with both scientific and lay

audiences, competency in field methods appropriate for entry-level environmental science positions, competency in the use and application of Geographic Information Systems (GIS), a basic understanding of environmental policy, and the ability to contribute to multidisciplinary teams. The University of New Hampshire is a recognized leader in environmental sciences research, and the environmental sciences program capitalizes on faculty expertise in this area. The full-time faculty members comprising this program have major teaching and research emphases in the areas of biogeochemical cycling, environmental chemistry, ecosystem science, geospatial science, global change, hydrology, plant ecology, soil science, and water resource management.

Employment opportunities include environmental consulting firms, educational facilities (e.g., science centers), environmental monitoring laboratories (e.g., water treatment plants; the Environmental Protection Agency), government agencies (e.g., the U.S. Geological Survey, Bureau of Land Management, Natural Resource Conservation Service), university and government research laboratories, and nongovernment environmental organizations. The environmental sciences program also constitutes an excellent preparation for graduate programs in several areas relating to the environment. Students should consult with their adviser early if their goals include further study.

Programs

- Environmental Sciences Major: Earth Systems Option (B.S.) (p. 126)
- Environmental Sciences Major: Ecosystems Option (B.S.) (p. 416)
- Environmental Sciences Major: Soil and Watersheds Option (B.S.) (p. 418)

Environmental Sciences Major: Ecosystems Option (B.S.)

https://colsa.unh.edu/natural-resources-environment/program/bs/environmental-sciences-major-ecosystems-option

Description

The College of Life Sciences and Agriculture (COLSA) and the College of Engineering and Physical Sciences (CEPS) jointly offer a bachelor of science degree in environmental sciences. Environmental science is an interdisciplinary field concerned with the interaction of biological, chemical, and physical processes that shape the environment, and control the response of natural systems to human activities. Students graduating with a degree in environmental sciences will have an understanding of these interacting processes, experience working in interdisciplinary teams to apply this understanding, and the ability to communicate effectively with both scientific and lay audiences. While in this program, students will acquire significant experience with field, laboratory and analytical methods appropriate for employment in professional environmental science positions as well as a basic understanding of environmental policy. The University of New Hampshire is a recognized leader in environmental sciences research, and the environmental sciences program capitalizes on faculty expertise in this area. Program faculty emphasize teaching and research in the areas of biogeochemical cycling, environmental chemistry, ecosystem science, global change, hydrology, plant ecology, soil science, and water resource management among many other fields. The Program has four options, and specific course requirements for the major vary by option. The ecosystems and soils and watersheds options are both managed by the Department of Natural Resources and the Environment in COLSA, and the geosystems and hydrology options are both managed by Earth Sciences in CEPS.

In the ecosystems option, students gain the knowledge and skills to understand natural systems and environmental processes in a variety of terrestrial and aquatic ecosystems, including forests, fields, streams, wetlands, rivers, and lakes. A major emphasis is on how to solve environmental problems in a time of rapid global change. Students will gain understanding of field and lab methods, geographic information systems (GIS), environmental policy, and how to communicate effectively with many audiences.

If interested in study abroad, the UNH EcoQuest program takes students to the wide variety of unique environments of New Zealand, and is fully integrated in the major in terms of meeting major requirements. After meeting all major and University general requirements, the student has 19 free credits with which to minor in a subject of interest, dual major in Sustainability, dive in deeper in Environmental Science topics, or simply take courses that are of interest.

This program develops your expertise in ecosystem dynamics and solving environmental problems, preparing you to pursue a career in conservation, resource management, research, education, or sustainability. Employment opportunities include environmental consulting firms; environmental monitoring organizations (e.g., water or wastewater treatment plants, National Ecological Observing Network); government agencies (e.g., the U.S. Geological Survey, the Environmental Protection Agency, Bureau of Land Management, Natural Resource Conservation Service); educational programs (e.g., science centers, Appalachian Mountain Club); university and government research laboratories; and non-government environmental organizations (e.g. Watershed associations). The environmental sciences program also constitutes an excellent preparation for graduate programs in several areas relating to the environment.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Scope of the Major (Introduction - 3 Courses)		
NR 400	Professional Perspectives in Natural Resources	1
NR 403	Introduction to Environmental Science	4
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
or NR 437	Principles of Sustainability	
The Scientific Basis (Foundation - 7 Courses)		
Biology I		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4

Biology II		
BIOL 411	Introductory Biology: Molecular and Cellular	4
or NR 439	Environmental Biology	
Chemistry I		
CHEM 403	General Chemistry I	4
or CHEM 405	Chemical Principles for Engineers	
or CHEM 411	Introductory Chemistry for Life Sciences	
Chemistry II		
NR 561	Chemistry of the Environment	4
or CHEM 404	General Chemistry II	
Physics		
PHYS 401	Introduction to Physics I	4
or PHYS 407	General Physics I	
Calculus		
MATH 424B	Calculus for Life Sciences	4
or MATH 425	Calculus I	
Statistics		
BIOL 528	Applied Biostatistics I	4
Earth and its Systems (Core - 6 Courses)		
Earth Science		
ESCI 401	Dynamic Earth	4
or ESCI 402	Earth History	
or ESCI 409	Geology and the Environment	
Aquatic Science		
NR 504	Freshwater Resources	4
Soils		
NR 501	Studio Soils	4
Climate/Weather		
ESCI 514	Introduction to Climate	3-4
or GEOG 473	Elements of Weather	
or GEOG 670	Climate and Society	
Ecology		
NR 527	Forest Ecology	4
or NR 660	Ecology and Biogeography of New Zealand	
or BIOL 541W	Ecology	
or MEFB 530	Evolution and Marine Diversity	
or MEFB 674	Ecology and Marine Environment	
Human Dimensions		
NR 602	Natural Resources and Environmental Policy	4
or NR 662	Environmental Policy, Planning and Sustainability in New Zealand	
or NR 507	Introduction to our Energy System and Sustainable Energy	
or NR 784	Sustainable Living - Global Perspectives	
or MEFB 702	Sustainable Marine Fisheries	
Environmental Toolkit (Methods - 2 Courses)		
Select two courses from the following:		7-8
ESCI 534	Techniques in Environmental Sciences	
NR 658	Introduction to Geographic Information Systems	
or ESCI 777	GIS for Earth & Environmental Sciences	
NR 757	Remote Sensing of the Environment	
or ESCI 778	Remote Sensing Earth & Environmental Sciences	
NR 713	Quantitative Ecology	
Ecosystem Integration (Advanced Topics - 4 Courses)		
Select four courses from the following:		16
Population and Community Ecology		
NR 765	Community Ecology	
or NR 734	Tropical Ecology	
or NR 706	Soil Ecology	
or NR 660	Ecology and Biogeography of New Zealand	
or NR 640	Wildlife Population Ecology	
or NR 642	Introduction to Biogeography	
or BIOL 720	Plant-Animal Interactions	
Ecosystems		
NR 730	Terrestrial Ecosystems	
or NR 751	Aquatic Ecosystems	
or NR 661	Restoration Ecology and Ecosystem Management in New Zealand	
or MEFB 508	Marine Ecosystem Research and Management	
Biogeochemistry		
NR 744	Biogeochemistry	
or NR 761	Environmental Soil Chemistry	
or NR 703	Watershed Water Quality Management	
or ESCI 642	Biogeosciences in the Earth System	
or ESCI 749W	Ocean Biogeochemistry	
Environmental Problem Solving		
ESCI 654	Fate and Transport in the Environment	
or NR 707	Environmental Modeling	
or NR 749	Forest Inventory and Modeling	
or NR 743	Addressing Arctic Challenges	
or NR 731	Agriculture and Environmental Change: Challenges and Solutions	
Integration and Research (The Capstone Experience) [1]		
Capstone:		
NR 663	Applied Directed Research in New Zealand	
or NR 795	Investigations	
or NR 799	Honors Senior Thesis	
Total Credits		**83-85**

Capstone Experience

NR 663 Applied Directed Research in New Zealand (EcoQuest if Senior Year), or NR 795 Investigations, or NR 799 Honors Senior Thesis, or approved research experience, or approved internship. Every student must complete a capstone experience senior year, or during the summer before senior year, if at least 90 credit hours have been completed.

1) A contract form provided by the program must be completed and signed by the student, the advisor, the program coordinator, and the capstone mentor (faculty or off-campus) before the capstone experience, by the end of the junior year.

2) A signed Capstone Experience Evaluation form must be submitted to your advisor by the end of the senior year in order to graduate.

Preparation for Capstone: Please discuss with your faculty advisor regularly what kind of capstone experience you would like to pursue. If you remain uncertain during the junior year, the Earth Science department offers a Capstone Preparation course, ESCI 796 Topics in the spring, but this is not required.

Individualizing Your Education (Electives)
One goal of this program is to allow students the opportunity to pursue minors, dual majors, research and study abroad opportunities, while still completing the degree in four years of full-time enrollment. To this end, the program requires a total of 85 credit hours. The University Discovery program includes 5 areas (20 credit hours) not covered by this major. These include English 401, Fine and Performing Arts, Humanities, Historical Perspectives, World Cultures (NOTE: The World Cultures category can be met by certain study abroad programs, including EcoQuest). Combined, Major and Discovery requirements total 105 credit hours. With a total of 128 credit hours required by the University for graduation, this leaves 23 credit hours that can be put towards minors, dual majors, study abroad, Directed Research, etc.

[1] Many students enroll in the EcoQuest program (a study abroad opportunity in New Zealand), which satisfies the policy requirement, and capstone requirement if taken senior year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
NR 400	Professional Perspectives in Natural Resources	1
NR 403	Introduction to Environmental Science	4
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
ENGL 401	First-Year Writing (or Discovery Course)	4
	Credits	**17**
Spring		
BIOL 411 or NR 439	Introductory Biology: Molecular and Cellular or Environmental Biology	4
MATH 424B	Calculus for Life Sciences	4
ESCI 401 or ESCI 402 or ESCI 409	Dynamic Earth or Earth History or Geology and the Environment	4
ENGL 401	First-Year Writing (or Discovery Course)	4
	Credits	**16**
Second Year		
Fall		
CHEM 411	Introductory Chemistry for Life Sciences	4
ESCI 534	Techniques in Environmental Sciences	3
NR 501	Studio Soils	4
Discovery Course		4
	Credits	**15**
Spring		
NR 561	Chemistry of the Environment	4
BIOL 528	Applied Biostatistics I	4
NR 504	Freshwater Resources	4
Discovery or Elective Course		4
	Credits	**16**
Third Year		
Fall		
PHYS 401	Introduction to Physics I	4
NR 527 or BIOL 541W	Forest Ecology or Ecology	4
Human Dimension Course		4
Discovery or Elective Course		4
	Credits	**16**
Spring		
Toolkit II Course		4
Populations/Community Ecology Course		4
Ecosystems Course		4
Discovery or Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
Environmental Problem Solving Course		4
GEOG 473	Elements of Weather	4
Elective Course		4
Capstone		
	Credits	**12**
Spring		
Biogeochemistry Course		4
Discovery or Elective Course		4
Elective Course		4
Capstone		
	Credits	**12**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

Key Learning Objectives:

- The primary Learning Outcome for the Environmental Science Program will be that students will master the content offered in the courses specified in the curriculum as assessed by performance on exams, labs and written assignments. This will include an understanding of the physical, chemical and biological processes central to the function of environmental systems, the mathematical concepts required to understand, explain and predict those processes, and the ability to determine the significance of results, both in terms of statistical probability and impact on the larger world.

The learning process leading to this mastery will require that students will have:

- Knowledge of how physical, chemical, and biological factors interact with human activities to shape the environment;
- Proficiency with environmental techniques including field, lab, GIS, or modeling;
- The ability to solve environmental problems;
- The ability to communicate orally or in writing about environmental dynamics.

Environmental Sciences Major: Soil and Watersheds Option (B.S.)

https://colsa.unh.edu/natural-resources-environment/program/bs/environmental-sciences-major-soil-watersheds-option

Description

The College of Life Sciences and Agriculture (COLSA) and the College of Engineering and Physical Sciences (CEPS) jointly offer a bachelor of science degree in environmental sciences. Environmental science is an interdisciplinary field concerned with the interaction of biological, chemical, and physical processes that shape the environment, and control the response of natural systems to human activities. Students graduating with a degree in environmental sciences will have an

understanding of these interacting processes, experience working in interdisciplinary teams to apply this understanding, and the ability to communicate effectively with both scientific and lay audiences. While in this program, students will acquire significant experience with field, laboratory and analytical methods appropriate for employment in professional environmental science positions as well as a basic understanding of environmental policy. The University of New Hampshire is a recognized leader in environmental sciences research, and the environmental sciences program capitalizes on faculty expertise in this area. Program faculty emphasize teaching and research in the areas of biogeochemical cycling, environmental chemistry, ecosystem science, global change, hydrology, plant ecology, soil science, and water resource management among many other fields. The Program has four options, and specific course requirements for the major vary by option. The ecosystems and soils and watersheds options are both managed by the Department of Natural Resources and the Environment in COLSA, and the geosystems and hydrology options are both managed by Earth Sciences in CEPS.

In the soil and watershed option, students gain the knowledge and skills to understand how watersheds function in order to inform how to protect and manage land and water resources. A major emphasis is on how land and water interact through the connection of soils, flowing water, and human alteration and their impact on soil health, water quantity, and water flow. A major emphasis is on how to solve environmental problems in a time of rapid global change. Students will gain understanding of field and lab methods, geographic information systems (GIS), environmental policy, and how to communicate effectively with many audiences.

If interested in study abroad, the UNH EcoQuest program takes students to the wide variety of unique environments of New Zealand, and is fully integrated in the major in terms of meeting major requirements. After meeting all major and University general requirements, the student has 19 free credits with which to minor in a subject of interest, dual major in Sustainability, dive in deeper in Environmental Science topics, or simply take courses that are of interest.

This program develops your expertise in ecosystem dynamics and solving environmental problems, preparing you to pursue a career in conservation, resource management, research, education, or sustainability. Employment opportunities include environmental consulting firms; environmental monitoring organizations (e.g., water or wastewater treatment plants, National Ecological Observing Network); government agencies (e.g., the U.S. Geological Survey, the Environmental Protection Agency, Bureau of Land Management, Natural Resource Conservation Service); educational programs (e.g., science centers, Appalachian Mountain Club); university and government research laboratories; and non-government environmental organizations (e.g. Watershed associations). The environmental sciences program also constitutes an excellent preparation for graduate programs in several areas relating to the environment.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Scope of the Major (Introduction - 3 Courses)		
NR 400	Professional Perspectives in Natural Resources	1
NR 403	Introduction to Environmental Science	4
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
or NR 437	Principles of Sustainability	
The Scientific Basis (Foundation - 7 Courses)		
Biology I:		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
Chemistry I:		
CHEM 403	General Chemistry I	4
or CHEM 405	Chemical Principles for Engineers	
or CHEM 411	Introductory Chemistry for Life Sciences	
Chemistry II:		
NR 561	Chemistry of the Environment	4
or CHEM 404	General Chemistry II	
Physics:		
PHYS 401	Introduction to Physics I	4
or PHYS 407	General Physics I	
Biology/Physics II:		
BIOL 411	Introductory Biology: Molecular and Cellular	4
or PHYS 402	Introduction to Physics II	
or PHYS 408	General Physics II	
Calculus:		
MATH 424B	Calculus for Life Sciences	4
or MATH 425	Calculus I	
Statistics:		
BIOL 528	Applied Biostatistics I	4
Earth and its Systems (Core - 6 Courses)		
Earth Science:		
ESCI 401	Dynamic Earth	4
or ESCI 402	Earth History	
or ESCI 409	Geology and the Environment	
Aquatic Science:		
NR 504	Freshwater Resources	4
Soils:		
NR 501	Studio Soils	4
Climate/Weather:		
ESCI 514	Introduction to Climate	3-4
or GEOG 473	Elements of Weather	
or GEOG 670	Climate and Society	
Ecology:		
BIOL 541W	Ecology	4-5
or NR 660	Ecology and Biogeography of New Zealand	
or NR 527	Forest Ecology	
or MEFB 530	Evolution and Marine Diversity	
or MEFB 674	Ecology and Marine Environment	
Human Dimensions:		
NR 602	Natural Resources and Environmental Policy	4
or NR 662	Environmental Policy, Planning and Sustainability in New Zealand	
or NR 507	Introduction to our Energy System and Sustainable Energy	
or NR 784	Sustainable Living - Global Perspectives	
or MEFB 702	Sustainable Marine Fisheries	
Environmental Toolkit (Methods - 2 Courses)		
Select two courses from the following:		7-8
ESCI 534	Techniques in Environmental Sciences	
NR 658	Introduction to Geographic Information Systems	
or ESCI 777	GIS for Earth & Environmental Sciences	
NR 757	Remote Sensing of the Environment	

or ESCI 778	Remote Sensing Earth & Environmental Sciences	
NR 707	Environmental Modeling	
NR 713	Quantitative Ecology	
Soil and Watershed Systems (Advanced Topics – 5 courses)		
Advanced Soils:		
NR 761	Environmental Soil Chemistry	4
or NR 706	Soil Ecology	
Watersheds:		
NR 703	Watershed Water Quality Management	4
Ecosystems:		
NR 730	Terrestrial Ecosystems	4
or NR 751	Aquatic Ecosystems	
or NR 661	Restoration Ecology and Ecosystem Management in New Zealand	
or MEFB 508	Marine Ecosystem Research and Management	
Biogeochemistry:		
NR 744	Biogeochemistry	4
or ESCI 642	Biogeosciences in the Earth System	
or ESCI 749W	Ocean Biogeochemistry	
Advanced Soils and Watersheds:		
NR 743	Addressing Arctic Challenges [1]	4
or NR 731	Agriculture and Environmental Change: Challenges and Solutions	
or ESCI 654	Fate and Transport in the Environment	
or ESCI 705	Principles of Hydrology	
or ESCI 710	Groundwater Hydrology	
or ESCI 747	Aqueous Geochemistry	
or CEE 796	Special Topics	
or CEE 754	Engineering Hydrology	
Integration and Research (The Capstone Experience). [2]		
Capstone:		
NR 663	Applied Directed Research in New Zealand	4
or NR 795	Investigations	
or NR 799	Honors Senior Thesis	
OR approved research experience, or approved internship. Every student must complete a capstone experience senior year, or during the summer before senior year,if at least 90 credit hours have been completed.		
a. A Contract form provided by the Program must be completed and signed by the student, the advisor, the program coordinator, and the capstone mentor (faculty or off-campus) before the capstone experience,by the end of Junior Year.		
b. A signed Capstone Experience Evaluation form must be handed in to your advisor by the end of Senior year in order to graduate. Preparation for Capstone: Please discuss with your faculty advisor regularly what kind of capstone experience you would like to pursue. If you remain uncertain during the junior year, the Earth Science department offers a Capstone Preparation course, ESCI 796 Topics in the spring, but this is not required.		
Individualization Your Education (15-16 Credits)		
Program Advisors will help students select additional courses from across the campus that relate to the student's areas of intellectual interest, and assist with the completion of minors, dual majors, study abroad programs, research projects, internships, etc.		15-16
Total Credits		**106-110**

1. NR 706 Soil Ecology or NR 761 Environmental Soil Chemistry if not already taken.
2. Many students enroll in the EcoQuest program (a study abroad opportunity in New Zealand), which satisfies the policy requirement, and capstone requirement if taken senior year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
NR 400	Professional Perspectives in Natural Resources	1
NR 403	Introduction to Environmental Science	4
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
BIOL 412 or PHYS 401	Introductory Biology: Evolution, Biodiversity and Ecology or Introduction to Physics I	4
ENGL 401	First-Year Writing (or Discovery Course)	4
	Credits	**17**
Spring		
BIOL 411 or PHYS 402	Introductory Biology: Molecular and Cellular or Introduction to Physics II	4
MATH 424B	Calculus for Life Sciences	4
ESCI 401 or ESCI 402 or ESCI 409	Dynamic Earth or Earth History or Geology and the Environment	4
ENGL 401	First-Year Writing (or Discovery Course)	4
	Credits	**16**
Second Year		
Fall		
CHEM 411	Introductory Chemistry for Life Sciences	4
ESCI 534	Techniques in Environmental Sciences	3
NR 501	Studio Soils	4
Discovery Course		4
	Credits	**15**
Spring		
NR 561	Chemistry of the Environment	4
BIOL 528	Applied Biostatistics I	4
NR 504	Freshwater Resources	4
Discovery or Elective Course		4
	Credits	**16**
Third Year		
Fall		
PHYS 401 or BIOL 412	Introduction to Physics I or Introductory Biology: Evolution, Biodiversity and Ecology	4
NR 527 or BIOL 541W	Forest Ecology or Ecology	4
Human Dimension Course		4
Discovery or Elective Course		4
	Credits	**16**
Spring		
Toolkit II Course		4
Advanced Soils Course		4
Ecosystems Course		4
Discovery or Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
Watersheds Course		4
GEOG 473	Elements of Weather	4
Discovery or Elective Course		4

Capstone	4
Credits	**16**
Spring	
Biogeochemistry Course	4
Advanced Soils and Watersheds Course	4
Elective Course	4
Capstone	4
Credits	**16**
Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

Key Learning Objectives:

- The primary Learning Outcome for the Environmental Science Program will be that students will master the content offered in the courses specified in the curriculum as assessed by performance on exams, labs and written assignments. This will include an understanding of the physical, chemical and biological processes central to the function of environmental systems, the mathematical concepts required to understand, explain and predict those processes, and the ability to determine the significance of results, both in terms of statistical probability and impact on the larger world.

The learning process leading to this mastery will require that students will have:

- Knowledge of how physical, chemical, and biological factors interact with human activities to shape the environment;
- Proficiency with environmental techniques including field, lab, GIS, or modeling;
- The ability to solve environmental problems;
- The ability to communicate orally or in writing about environmental dynamics.

Forestry

Forests are central to meeting today's challenges of climate change, biodiversity, and the sustainability of rural communities and economies. The forestry program at the University of New Hampshire prepares its graduates with the scientific and managerial knowledge and skills to address these environmental and resource management problems at local, regional, and global scales.

Forestry is the art and science of managing and understanding forests, their use, and their conservation. It embraces both natural and human dimensions of sustainability. Forestry education at UNH focuses on sustainable management of forests for biodiversity, productivity, and health, based on a multidisciplinary approach. The program's goal is to provide a sound professional preparation, a broad general education, and the flexibility to cultivate special abilities and interests. Students are encouraged to develop an area of concentration or to complete a minor in consultation with their academic adviser. The Bachelor of Science in Forestry degree (B.S.F.) at UNH is accredited by the Society of American Foresters (SAF). The SAF is recognized by the Council on Postsecondary Accreditation and the U.S. Department of Education as the accrediting body for forestry in the United States.

A UNH forestry degree can be the gateway to a rewarding profession. UNH forestry graduates manage forests to provide wildlife habitat and recreation opportunities, care for soil and water resources, protect and restore forest ecosystems, and assure a sustainable supply of forest products. They are employed by private industry, public agencies, public interest groups, education institutions, research organizations, and consulting firms. Many students enter graduate school for advanced study in forest biology or management while others have found exciting international opportunities.

https://colsa.unh.edu/natural-resources-environment

Programs

- Forestry Major (B.S.F.) (p. 421)
- Forestry Minor (p. 423)

Faculty

Forestry Program Faculty

Forestry Major (B.S.F.)

https://www.unh.edu/program/bachelor-science-forestry/forestry

Description

Forestry is an interdisciplinary profession, embracing the sustainable management of forest ecosystems for productivity, biodiversity, and health. The Forestry program's goals are to provide a solid professional preparation with a strong field component, founded in a broad general education, and with the flexibility to allow students to pursue special abilities and interests. The Bachelor of Science in Forestry (B.S.F.) degree is accredited by the Society of American Foresters.

Forestry graduates help manage and conserve public and private forests, addressing major environmental challenges including climate change, biodiversity protection, and sustainable resource management. They use science, planning, and geospatial technology to protect and restore forest ecosystems, ensure a sustainable forest product industry, provide wildlife habitat and recreational opportunities, and conserve soils and watersheds.

Program Mission, Goals and Objectives

The **mission** of UNH's Department of Natural Resources and the Environment, of which the Forestry Program is an integral part, is to serve as an educational center for the scholarly study of environmental and social sciences, and their application to the policy and management of natural resources from local to global scales. This is accomplished through education, research and outreach. This mission reflects UNH's larger mission to provide comprehensive, high-quality undergraduate programs and graduate programs of distinction, including a strong commitment to serving the public good and promoting the excitement of discovery among faculty and students.

The **goal** of the Forestry Program is to train natural resource professionals to sustainably manage forested landscapes for diverse objectives and in ways that balance changing social, cultural, economic, and environmental interests and priorities.

Our **educational objectives** are to:

1. Develop a strong knowledge base about the ecology and dynamics of forest ecosystems, including interactions between trees, wildlife, insects, soils, water, humans, and other ecosystem components.
2. Understand how different policies and management decisions affect forest dynamics over short to long time scales, and on different spatial scales.
3. Cultivate the necessary skills to manage forests for diverse objectives and to assess, respect, and balance the interests of different groups to achieve societal benefits.
4. Be able to critically evaluate scientific information and integrate this with professional experience and changing societal values to support adaptive management of forest resources.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
BIOL 528	Applied Biostatistics I	4
MATH 424B	Calculus for Life Sciences	4
or MATH 420	Finite Mathematics	
or MATH 425	Calculus I	
NR 415	Natural Resources Field Methods	2
NR 425	Field Dendrology	4
NR 433	Wildlife Ecology	4
BIOL 409	Green Life: Introducing the Botanical Sciences	4
or BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	
CHEM 403	General Chemistry I	4
or CHEM 411	Introductory Chemistry for Life Sciences	
or PHYS 401	Introduction to Physics I	
NR 411	Environmental and Resource Economics Perspectives	4
or ECON 402	Principles of Economics (Micro)	
NR 501	Studio Soils	4
NR 504	Freshwater Resources	4
NR 506	Forest Entomology	4
NR 527	Forest Ecology	4
NR 600	Work Experience	0
CMN 500	Public Speaking	4
or THDA 522	Storytelling, Story Theatre, and Involvement Dramatics	
NR 602	Natural Resources and Environmental Policy	4
NR 643	Economics of Forestry	4
NR 658	Introduction to Geographic Information Systems	4
NR 579	Wildland Fire Ecology and Management	4
NR 729	Silviculture	4
NR 757	Remote Sensing of the Environment	4
NR 782	Forest Health in a Changing World	4
or AGFS 651	Plant Pathology	
NR 745	Forest Management	4
NR 749	Forest Inventory and Modeling	4
RMP 711	Recreation Resource Management	4
or NR 767W	Social Impact Assessment	
or RMP 511	Issues of Wilderness and Nature in American Society	
Total Credits		**90**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		**Credits**
BIOL 528	Applied Biostatistics I	4
ENGL 401	First-Year Writing	4
Select one of the following:		4
MATH 424B	Calculus for Life Sciences	
MATH 420	Finite Mathematics	
MATH 425	Calculus I	
NR 415	Natural Resources Field Methods	2
NR 425	Field Dendrology	4
NR 433	Wildlife Ecology	4
BIOL 409 or BIOL 412	Green Life: Introducing the Botanical Sciences or Introductory Biology: Evolution, Biodiversity and Ecology	4
Discovery Elective (FPA, HP, ETS, HUM, or WC)		4
Discovery Elective (FPA, HP, ETS, HUM, or WC)		4
	Credits	**34**
Second Year		
CHEM 403 or CHEM 411 or PHYS 401	General Chemistry I or Introductory Chemistry for Life Sciences or Introduction to Physics I	4
NR 411 or ECON 402	Environmental and Resource Economics Perspectives or Principles of Economics (Micro)	4
NR 501	Studio Soils	4
NR 504	Freshwater Resources	4
NR 506	Forest Entomology	4
NR 527	Forest Ecology	4
NR 600	Work Experience	0
Oral Communications Skills Course		4
Discovery Elective (FPA, HP, HUM, ETS, or WC)		4
	Credits	**32**
Third Year		
NR 602	Natural Resources and Environmental Policy	4
NR 643	Economics of Forestry	4
NR 658	Introduction to Geographic Information Systems	4
NR 579	Wildland Fire Ecology and Management	4
NR 729	Silviculture	4
NR 757	Remote Sensing of the Environment	4
NR 782 or AGFS 651	Forest Health in a Changing World or Plant Pathology	4

Discovery elective (FPA, HP, HUM, ETS, or WC)		4
	Credits	**32**
Fourth Year		
NR 745	Forest Management	4
NR 749	Forest Inventory and Modeling	4
Select one of the following:		4
RMP 711	Recreation Resource Management	
NR 767W	Social Impact Assessment	
RMP 511	Issues of Wilderness and Nature in American Society	
Discovery elective (FPA, HP, HUM, ETS, or WC)		4
Elective		4
Elective		4
Elective		4
Elective		4
	Credits	**32**
	Total Credits	**130**

All forestry majors must satisfy the B.S.F. requirements and all Discovery Program requirements. Students must satisfy the Inquiry requirement of the Discovery Program by completing an Inquiry or Inquiry-attribute course. Seniors must also satisfy the capstone experience requirement of the Discovery Program. The capstone explores areas of interest based on the integration of prior learning. The capstone requirement may be satisfied through a course (NR 745 Forest Management), created work or product, or some form of experiential learning (e.g., honors thesis, mentored research project, and other special student activity). Departments are responsible for certifying that graduating seniors have met the capstone requirement for their majors.

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Identify the major species of plants and wildlife and their distribution and habitat requirements.
- Understand the ecological concepts related to the structure, composition, and dynamics of forest ecosystems, including succession, competition, productivity, nutrient cycling, stand development, and wildlife populations.
- Understand soil properties, hydrology, water resources, and watershed functions.
- Understand how forest health and dynamics are impacted by different human and natural disturbances, including pests and diseases, climate change, pollutants, extreme climate events, management interventions.
- Design and conduct forest inventories using appropriate sampling methods and units of measurement.
- Analyze and interpret forest inventory data, and to use the information to project future forest stand development processes and tree conditions.
- Use a variety of spatial analysis tools to assess landscape scale characteristics and produce maps of forest resources distribution.
- Explain forest development trajectories in both written and oral form and apply appropriate computer models and assessment techniques.
- Understand forest policy and the processes that influence policy development.
- Understand and apply economic principles to assessing the financial opportunities and risks of forestry operations.
- Understand how federal, state, and local laws and regulations govern the practice of forestry.
- Understand the administration, ownership, and organization of forest management enterprises.
- Integrate and effectively communicate the technical, financial, human resources, and legal aspects of administering public and private enterprises.
- Develop management plans that effectively integrate and balance multiple landowner (or stakeholder/societal) objectives and the ecological conditions and constraints of the biophysical system.
- Analyze the economic, environmental and social consequences of forest resource management strategies and decisions, and to evaluate their tradeoffs.
- Apply appropriate decision-making tools and techniques to evaluate alternative forest management practices and plans.
- Demonstrate effective problem-solving and teamwork skills, professional and ethical conduct, and respect for diverse values and interests.
- Describe and explain to different audiences in both written and oral form alternative options for managing forest resources to achieve multiple objectives.

Forestry Minor

https://www.unh.edu/program/minor/forestry

Description

The minor in Forestry serves as a concentrated study, beyond a student's primary major, that allows students to explore their interest in forest ecology and management, and to build skills that can help launch a career in forest conservation.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits).

Code	Title	Credits
Required Courses		
NR 425	Field Dendrology	4
NR 527	Forest Ecology	4
Select one course from the following:		4
NR 749	Forest Inventory and Modeling	
NR 757	Remote Sensing of the Environment	
Select one course from the following:		4
NR 729	Silviculture	
NR 745	Forest Management	
Electives		
Select 4 credits from the list below, or an alternative option from the list above:		4
Electives (4 credit)		
NR 506	Forest Entomology	
NR 564	Urban Forestry and Arboriculture	
NR 579	Wildland Fire Ecology and Management	
NR 643	Economics of Forestry	
NR 658	Introduction to Geographic Information Systems	

NR 703	Watershed Water Quality Management	
NR 734	Tropical Ecology	
NR 765	Community Ecology	
NR 781	Agroforestry	
NR 782	Forest Health in a Changing World	
Electives (2 credit)		
NR 575	Forest Operations	
NR 576	Forest Products	
Total Credits		**20**

Genetics (GEN)

Genetics and genomics are central to all aspects of the life sciences. Genetics is the branch of biology that deals with heredity, variation of genes among individuals in a population, and the expression and regulation of genes. Genomics focuses on determining the structure and function of genomes and includes the mapping of genes, high-throughput DNA sequencing, and investigating the molecular mechanisms by which genetic and environmental factors contribute to phenotypes. Every day, scientists are using the tools of genetics and genomics to make exciting discoveries in fields such as molecular medicine, cancer research, biodiversity, and sustainability.

Within the Genetics (GEN) major, students may choose the Genomics option (Genetics:Genomics). Genetics provides a solid foundation in biology, biochemistry, microbiology, chemistry, physics, math, and cell biology. Students also take advanced courses in molecular genetics, bioinformatics, molecular evolution, and genomics. Genetics students receive additional training in wet lab techniques. The Genetics:Genomics option provides additional training in genomics, evolutionary genetics, and computer programming for bioinformatics.

There are many opportunities for interested students to gain research experience through formal or informal research projects in faculty members' laboratories. The genetics faculty conduct research on diverse topics such as evolution, gene structure and function, host-microbe interactions, genome sequencing and analysis, heredity, and diversity in populations. Faculty research areas encompass microbial, plant, and animal genetics. Genetics faculty are committed to mentoring undergraduate students in independent research experiences in their laboratories, which provide students with exposure to and training in cutting-edge research technologies.

Students with degrees in genetics or genomics are well prepared to apply to graduate schools (e.g., for training as genetic counselors or researchers) or professional schools, or to pursue careers in biotechnology companies, forensics labs, hospitals, university research laboratories, or government agencies. Two additional courses are needed for application to professional programs (e.g., medical or dental school). Graduates may also be employed in fields such as management, sales, marketing, regulatory affairs, technical writing, or science journalism. With supplementary courses in education, graduates with a bachelor's degree in genetics or genomics can teach at the elementary, middle, or high school level.

Pre-Professional Health Programs

Students interested in postgraduate careers in the health care professions should visit the Pre-Professional Health Programs Advising website. Requirements for specific types of professional schools (e.g., medical, dental, physician assistant, pharmacy, etc.) are available from Pre-Health Advising. Students interested in veterinary medicine should consult the Pre-Veterinary Medicine Program. Many of the prerequisite courses required by professional schools are also requirements of the genetics major, but students should consult with their faculty adviser to create a plan of study that best prepares them for pursuing a career in one of these health professions.

https://colsa.unh.edu/molecular-cellular-biomedical-sciences

Programs

- Genetics Major (B.S.) (p. 424)
- Genetics Major: Genomics Option (B.S.) (p. 427)
- Genetics Minor (p. 430)

Faculty

Genetics Program Faculty

Genetics Major (B.S.)

https://www.unh.edu/program/bachelor-science/genetics

Description

The **Genetics program (GEN)** explores the world of genetics and genomics in plants, animals, and microbes. Genetics majors are interested in understanding how DNA, along with the environment, specifies simple traits like hair color to more complex traits like high blood pressure, diabetes, and mental illness. The Genetics faculty strongly value hands-on learning and many GEN students conduct undergraduate research under the supervision of our faculty. GEN graduates are prepared for successful careers in the biotechnology fields or for entry into a variety of graduate school, genetic counseling, or health professional programs.

The Genetics program offers course work and laboratories in:

- molecular genetics
- bioinformatics
- human genetics
- comparative genomics
- plant genetics
- microbial genetics and evolution
- population and evolutionary genetics

Students in the Genetics program may participate in a variety of experiential learning activities including:

- independent research experiences in laboratories of UNH faculty
- work at the Hubbard Center for Genome Studies or Research Computing Center
- internships at biotechnology companies in the Greater Boston area
- internships with genetics counselors at area medical centers

GEN graduates have been successful in attaining careers as:

- research scientists and laboratory technicians in
  - biotechnology and pharmaceutical companies
  - academic research programs
  - forensics

- biomedical research centers & medical schools
- government agencies
- genetic counselors
- educators
- technical support associates

GEN graduates are prepared for further education in:

- professional health programs
  - genetic counseling
  - medical school
  - dental school
  - allied health programs (physician assistant, pharmacist, nursing or pathologist's assistant programs)
  - veterinary school
- graduate programs such as
  - Genetics and Genomics
  - Integrative Biology
  - Neurogenomics
  - Molecular Biology
  - Microbiology
  - Environmental Sciences
  - Public Health
  - Computer Science

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students majoring in genetics take seven Foundation courses, six Bioscience Core courses, four Genetics Core courses and four Major Elective courses. One capstone experience, supervised and approved within the major, is required of all seniors. In addition, all other University requirements must be completed, including those for the University Discovery Program and Writing Program.

A minimum grade of C- minus or better is required in Statistics and all Bioscience Core, Genetics Core, and Major Elective courses.

Required Courses

Code	Title	Credits
Foundation Courses		
CHEM 403	General Chemistry I [1]	4
CHEM 404	General Chemistry II	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory [2]	5
MATH 424B	Calculus for Life Sciences [3]	4
BIOL 528	Applied Biostatistics I	4
PHYS 401	Introduction to Physics I	4
PHYS 402	Introduction to Physics II	4

1 Fulfills Physical Science Discovery requirement

2 Students applying to health profession schools need a full year of Organic Chemistry, a full year of Introductory Biology, as well as a full year of English. CHEM 651/CHEM 653 and CHEM 652/CHEM 654 should be taken in place of CHEM 545/CHEM 546; ENGL 502 or ENGL 503 in suggested in addition to ENGL 401. See Pre-Professional Health Program Advising.

3 Fulfills Quantitative Reasoning Discovery requirement

Code	Title	Credits
Bioscience Core Courses		
BIOL 411	Introductory Biology: Molecular and Cellular [4]	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
GEN 604	Principles of Genetics	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BMCB 605	Principles of Cell Biology	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5

4 Fulfills Biological Science Discovery requirement, Discovery Inquiry requirement, and Discovery laboratory requirement

Code	Title	Credits
Genetics Core Courses		
GEN 606	Genetics Lab	4
GEN 711	Genomics and Bioinformatics	4
GEN 704	Microbial Genetics and Genomics [5]	5
or GEN 771	Molecular Genetics	
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1

Electives

Four (4) unique major electives are required from the below categories.

Code	Title	Credits
Laboratory-Based Electives		
Select one from the following:		
GEN 704	Microbial Genetics and Genomics [5]	5
GEN 705 & GEN 725	Population Genetics and Population Genetics Lab [5]	5
GEN 717	Molecular Microbiology	5
GEN 795	Investigations in Genetics (4-credit minimum) [6]	1-4
GEN 795W	Investigations in Genetics (4-credit minimum) [6]	1-4
GEN 799	Senior Thesis (4-credit minimum) [6]	1-4
GEN 799H	Honors Senior Thesis (4-credit minimum) [6]	1-4
BMCB 753	Cell Culture	5
BMCB 754	Molecular Biology Research Methods	5
INCO 790	Advanced Research Experience (4-credit minimum) [6]	1-4

Code	Title	Credits
Population/Evolutionary Genetics Electives		
Select one from the following:		
GEN 705 & GEN 725	Population Genetics and Population Genetics Lab [5]	5
GEN 715	Molecular Evolution	4
GEN 772	Evolutionary Genetics of Plants	4
GEN 713	Microbial Ecology and Evolution	4

5 Where listed, this course may fulfill another category (Genetics Core, Laboratory-Based Major Elective, or Population/Evolutionary Genetics Major Elective), IF students take one additional Bioscience Major Elective.

[6] Must be a research project with a genetics focus.

Code	Title	Credits
Bioscience Electives		
Select two from the following:		
GEN 704	Microbial Genetics and Genomics [5]	5
GEN 705 & GEN 725	Population Genetics and Population Genetics Lab [5]	5
GEN 706	Human Genetics	4
GEN 712	Programming for Bioinformatics	5
GEN 713	Microbial Ecology and Evolution	4
GEN 715	Molecular Evolution	4
GEN 717	Molecular Microbiology	5
GEN 721	Comparative Genomics	4
GEN 771	Molecular Genetics	4
GEN 772	Evolutionary Genetics of Plants	4
GEN 774	Techniques in Plant Genetic Engineering and Biotechnology	4
GEN 795	Investigations in Genetics (4-credit minimum) [6]	1-4
GEN 795W	Investigations in Genetics (4-credit minimum) [6]	1-4
GEN 799	Senior Thesis (4-credit minimum) [6]	1-4
GEN 799H	Honors Senior Thesis (4-credit minimum) [6]	1-4
ANSC 602	Animal Rights and Societal Issues	4
ANSC 612	Genetics of Animals	4
ANSC 701	Physiology of Reproduction	4
BIOL 704	Plant-Microbe Interactions	3
BIOL 706	Data Science with R for the Life Sciences	4
BIOL 711	Experimental Design & Analysis	4
BMCB 750		3
BMCB 753	Cell Culture	5
BMCB 754	Molecular Biology Research Methods	5
BMCB 760	Pharmacology	4
BMCB 763	Biochemistry of Cancer	4
BMCB 794	Protein Structure and Function	4
BMS 650	Molecular Diagnostics	4
BMS 702	Endocrinology	4
BMS 705	Immunology	3
BMS 706	Virology	3
BMS 718	Mammalian Physiology	4
BMS 719	Host-Microbe Interactions	4
BMS 735	Molecular and Cellular Parasitology	4
BMS 740	Human Microbiome	4
INCO 790	Advanced Research Experience (4-credit minimum)	1-4
NR 706	Soil Ecology	4
ZOOL 625 & ZOOL 626W	Principles of Animal Physiology and Animal Physiology Laboratory	5
ZOOL 690	Evolution	4
ZOOL 736	Genes and Behavior	4
ZOOL 777W	Neuroethology	4

Capstone

The capstone explores areas of interest based on the integration of prior learning. The capstone requirement may be satisfied through a course, created work or product, or some form of experiential learning (e.g., honors thesis, mentored research project, or other special student activity). Students may take more than one capstone course. Capstone completion is never displayed on Degree Works; your advisor will certify capstone completion at the time of graduation. Students must have 90 credits or more when completing their capstone requirement. Contact your advisor for questions about capstones.

Code	Title	Credits
Approved Capstone Courses		
GEN 704	Microbial Genetics and Genomics	5
GEN 705 & GEN 725	Population Genetics and Population Genetics Lab	5
GEN 715	Molecular Evolution	4
GEN 717	Molecular Microbiology	5
GEN 790	Undergraduate Teaching Experience (4 credit minimum; classroom presentation required)	1-4
GEN 795	Investigations in Genetics (4-credit minimum) [6]	1-4
GEN 795W	Investigations in Genetics (4-credit minimum) [6]	1-4
GEN 799	Senior Thesis (4-credit minimum) [6]	1-4
GEN 799H	Honors Senior Thesis (4-credit minimum) [6]	1-4
INCO 790	Advanced Research Experience (4-credit minimum) [6]	1-4

[6] Must be a research project with a genetics focus.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
BIOL 411	Introductory Biology: Molecular and Cellular	4
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
ENGL 401	First-Year Writing	4
CHEM 403	General Chemistry I	4
Discovery course		4
	Credits	**17**
Spring		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
MATH 424B	Calculus for Life Sciences	4
CHEM 404	General Chemistry II	4
Discovery course		4
	Credits	**16**
Second Year		
Fall		
GEN 604	Principles of Genetics	4
BMCB 605	Principles of Cell Biology	4
BIOL 528	Applied Biostatistics I	4
Discovery course		4
	Credits	**16**
Spring		
GEN 606	Genetics Lab	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
Discovery course		4
	Credits	**18**
Third Year		
Fall		
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
PHYS 401	Introduction to Physics I	4
Discovery course		4

Elective (any course)		4
	Credits	**17**
Spring		
GEN 711	Genomics and Bioinformatics	4
PHYS 402	Introduction to Physics II	4
Major Elective (Population or Evolutionary Genetics)		4
Discovery course		4
	Credits	**16**
Fourth Year		
Fall		
Genetics Core course		4
Major Elective (Laboratory based)		4-5
Major Elective (Bioscience/possible Capstone)		4-5
Elective (any course)		4
	Credits	**16-18**
Spring		
Major Elective (Bioscience)		4
Elective (any course)		4
Elective (any course)		4
	Credits	**12**
	Total Credits	**128-130**

Student Learning Outcomes

Program Learning Outcomes

Core Knowledge in Genetics

- Students will be able to describe DNA, its role, structure, how DNA is packaged in the chromosomes in terms of histones, nucleosomes, and chromatin, including its discovery, how has modern genomics influenced, and differences between prokaryotes and eukaryotes.
- Students will be able to describe the central dogma of molecular biology, including specific details related to replication, transcription, and translation.
- Students will be able to define and describe evolution, how drift, gene flow, mutation, natural selection, recombination, within a population genetic framework, may result in evolution.
- Students will be able to describe the differences between mitosis and meiosis and how errors in these processes may effect phenotype, cause disease, etc.
- Students will be able to evaluate how genes and the environment can interact to produce a phenotype, including allelic differences and changes in gene regulation.
- Students will be able to describe the concept of deep time, and how comparing genes and genomes allows us to understand evolution and relatedness between species.
- Students will be able to use pedigrees to determine mode of inheritance of a trait.
- Students will be able to describe ethical issues related to modern genomics and implications for health care and insurance, interpersonal relationships, family planning, etc.
- Students will be able to describe high-throughput sequencing, and how it has changed the practice of modern genetics.

Quantitative Literacy, Inquiry & Analysis

- Students will be able to apply the scientific method to examine experimental evidence and draw informed conclusions.
- Students will be able to use graphs to represent scientific data.
- Students will be able to apply statistical methods to interpret scientific data.

Critical Thinking & Problem Solving

- Students will be able to use data to troubleshoot an unexpected outcome .
- Students will be able to apply core knowledge to critically interpret scientific data.

Written Communication

- Students will demonstrate written skills to communicate scientific knowledge and experimental data.

Oral Communication

- Students will be able to demonstrate oral presentation skills to communicate scientific knowledge and experimental data.

Genetics Major: Genomics Option (B.S.)

https://www.unh.edu/program/bachelor-science/genetics-genomics

Description

The **Genetics:Genomics program (GEN)** explores the world of genetics and genomics in plants, animals, and microbes. Genomics is the study of genomes and includes topics like DNA structure and function, high-throughput sequencing, and computational comparison of the genomes of different organisms. The Genetics faculty strongly value hands-on learning and many GEN students conduct undergraduate research under the supervision of our faculty. GEN graduates are prepared for successful careers in biotechnology fields or for entry into a variety of graduate school or health professional programs.

The Genetics program offers course work and laboratories in:

- molecular genetics
- bioinformatics
- human genetics
- comparative genomics
- plant genetics
- microbial genetics
- population and evolutionary genetics

Students in the Genetics program may participate in a variety of experiential learning activities including:

- independent research experiences in laboratories of UNH faculty
- work at the Hubbard Center for Genome Studies or Research Computing Center
- internships at biotechnology companies in the Greater Boston area
- internships with genetics counselors at area medical centers

GEN graduates have been successful in attaining careers as:

- research scientists and laboratory technicians in
  - biotechnology and pharmaceutical companies
  - academic research programs
  - forensics
  - biomedical research centers & medical schools
  - government agencies
- genetic counselors
- educators
- technical support associates

GEN graduates are prepared for further education in:

- professional health programs
  - genetic counseling
  - medical school
  - dental school
  - allied health programs (physician assistant, pharmacist, nursing or pathologist's assistant)
  - veterinary school
- graduate programs such as
  - Genetics and Genomics
  - Integrative Biology
  - Neurogenomics
  - Molecular Biology
  - Microbiology
  - Environmental Sciences
  - Public Health
  - Computer Science

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students majoring in Genetics with the Genomics option take seven Foundation courses, six Bioscience Core courses, four Genetics Core courses and five Major Elective courses. One capstone experience, supervised and approved within the major, is required of all seniors. The capstone explores areas of interest based on the integration of prior learning. In addition, all other University requirements must be completed, including those for the University Discovery Program and the Writing Program.

A minimum grade of C- minus or better is required in statistics and all Bioscience Core, Genetics Core, and Major Elective courses.

Required Courses

Code	Title	Credits
Foundation Courses		
CHEM 403	General Chemistry I [1]	4
CHEM 404	General Chemistry II	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory [2]	5
MATH 424B	Calculus for Life Sciences [3]	4
BIOL 528	Applied Biostatistics I	4
PHYS 401	Introduction to Physics I	4
PHYS 402	Introduction to Physics II	4

1 Fulfills Physical Science Discovery requirement
2 Students applying to health profession schools need a full year of Organic Chemistry, a full year of introductory Biology, and a full year of English. CHEM 651/CHEM 653 and CHEM 652/CHEM 654 should be taken in place of CHEM 545/CHEM 546; ENGL 502 or ENGL 503 is suggested in addition to ENGL 401. See Pre-Professional Health Program advising.
3 Fulfills Quantitative Reasoning Discovery requirement

Code	Title	Credits
Bioscience Core Courses		
BIOL 411	Introductory Biology: Molecular and Cellular [4]	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
GEN 604	Principles of Genetics	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BMCB 605	Principles of Cell Biology	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5

4 Fulfills Biological Science Discovery requirement, Discovery Inquiry requirement, and Discovery laboratory requirement

Code	Title	Credits
Genetics Core Courses		
GEN 606	Genetics Lab	4
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
GEN 711	Genomics and Bioinformatics	4
Select one of the following:		
GEN 704	Microbial Genetics and Genomics	5
GEN 771	Molecular Genetics	4

Electives

Five (5) unique major electives are required.

Code	Title	Credits
Required Electives		
GEN 712	Programming for Bioinformatics	5
GEN 721	Comparative Genomics	4

Code	Title	Credits
Population/Evolutionary Genetics Electives		
Select two from the following:		
GEN 705 & GEN 725	Population Genetics and Population Genetics Lab [5]	5
GEN 713	Microbial Ecology and Evolution	4
GEN 715	Molecular Evolution	4
GEN 772	Evolutionary Genetics of Plants	4

Code	Title	Credits
Bioscience Electives		
Select one from the following:		
GEN 704	Microbial Genetics and Genomics [5]	5
GEN 705 & GEN 725	Population Genetics and Population Genetics Lab [5]	5

GEN 706	Human Genetics	4
GEN 713	Microbial Ecology and Evolution	4
GEN 715	Molecular Evolution	4
GEN 717	Molecular Microbiology	5
GEN 771	Molecular Genetics	4
GEN 772	Evolutionary Genetics of Plants	4
GEN 795	Investigations in Genetics (4 credit minimum) [6]	1-4
GEN 795W	Investigations in Genetics (4 credit minimum) [6]	1-4
GEN 799	Senior Thesis (4 credit minimum) [6]	1-4
GEN 799H	Honors Senior Thesis (4-credit minimum) [6]	1-4
ANSC 602	Animal Rights and Societal Issues	4
ANSC 612	Genetics of Animals	4
ANSC 701	Physiology of Reproduction	4
BIOL 704	Plant-Microbe Interactions	3
BIOL 706	Data Science with R for the Life Sciences	4
BIOL 711	Experimental Design & Analysis	4
BIOL 752	New England Mushrooms: a Field and Lab Exploration	4
BMCB 750		3
BMCB 753	Cell Culture	5
BMCB 754	Molecular Biology Research Methods	5
BMCB 760	Pharmacology	4
BMCB 763	Biochemistry of Cancer	4
BMCB 794	Protein Structure and Function	4
BMS 650	Molecular Diagnostics	4
BMS 702	Endocrinology	4
BMS 705	Immunology	3
BMS 706	Virology	3
BMS 718	Mammalian Physiology	4
BMS 719	Host-Microbe Interactions	4
BMS 735	Molecular and Cellular Parasitology	4
BMS 740	Human Microbiome	4
INCO 790	Advanced Research Experience (4-credit minimum) [6]	1-4
NR 706	Soil Ecology	4
ZOOL 625 & ZOOL 626W	Principles of Animal Physiology and Animal Physiology Laboratory	5
ZOOL 690	Evolution	4
ZOOL 736	Genes and Behavior	4
ZOOL 777W	Neuroethology	4
GEN 774	Techniques in Plant Genetic Engineering and Biotechnology	4

[5] This course can count as both a Bioscience Major Elective AND a Population or Evolutionary Genetics Major Elective IF students take one additional Bioscience Major Elective.

[6] Must be a research project with a genetics focus

Capstone

The capstone explores areas of interest based on the integration of prior learning. The capstone requirement may be satisfied through a course, created work or product, or some form of experiential learning (e.g., honors thesis, mentored research project, or other special student activity). Students may take more than one capstone course. Capstone completion is never displayed on Degree Works; your advisor will certify capstone completion at the time of graduation. Students must have 90 credits or more when completing their capstone requirement. Contact your advisor for questions about capstones.

Code	Title	Credits
Approved Capstone Courses		
GEN 704	Microbial Genetics and Genomics	5
GEN 705 & GEN 725	Population Genetics and Population Genetics Lab	5
GEN 715	Molecular Evolution	4
GEN 717	Molecular Microbiology	5
GEN 790	Undergraduate Teaching Experience (4 credit minimum; classroom presentation required)	1-4
GEN 795	Investigations in Genetics (4-credit minimum) [6]	1-4
GEN 795W	Investigations in Genetics (4-credit minimum) [6]	1-4
GEN 799	Senior Thesis (4-credit minimum) [6]	1-4
GEN 799H	Honors Senior Thesis (4-credit minimum) [6]	1-4
INCO 790	Advanced Research Experience (4-credit minimum) [6]	1-4

[6] Must be a research project with a genetics focus

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
BIOL 411	Introductory Biology: Molecular and Cellular	4
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
ENGL 401	First-Year Writing	4
CHEM 403	General Chemistry I	4
Discovery course		4
	Credits	**17**
Spring		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
MATH 424B	Calculus for Life Sciences	4
CHEM 404	General Chemistry II	4
Discovery course		4
	Credits	**16**
Second Year		
Fall		
GEN 604	Principles of Genetics	4
BMCB 605	Principles of Cell Biology	4
BIOL 528	Applied Biostatistics I	4
Discovery course		4
	Credits	**16**
Spring		
GEN 606	Genetics Lab	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
Discovery course		4
	Credits	**18**
Third Year		
Fall		
GEN 712	Programming for Bioinformatics	5
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
PHYS 401	Introduction to Physics I	4
Discovery course		4
	Credits	**18**
Spring		
GEN 711	Genomics and Bioinformatics	4

GEN 721	Comparative Genomics	4
PHYS 402	Introduction to Physics II	4
Discovery course		4
	Credits	**16**
Fourth Year		
Fall		
Genetics Core course		4
Major Elective (Pop/Evol Genetics; possible Capstone)		4
Elective (any course)		4
Elective (any course)		4
	Credits	**16**
Spring		
Major Elective (Bioscience)		4
Major Elective (Pop/Evol Genetics)		4
Elective (any course)		4
Elective (any course)		3-5
	Credits	**15-17**
	Total Credits	**132-134**

Student Learning Outcomes

Program Learning Outcomes

Core Knowledge in Genetics

- Students will be able to describe DNA, its role, structure, how DNA is packaged in the chromosomes in terms of histones, nucleosomes, and chromatin, including its discovery, how has modern genomics influenced, and differences between prokaryotes and eukaryotes.
- Students will be able to describe the central dogma of molecular biology, including specific details related to replication, transcription, and translation.
- Students will be able to define and describe evolution, how drift, gene flow, mutation, natural selection, recombination, within a population genetic framework, may result in evolution.
- Students will be able to describe the differences between mitosis and meiosis and how errors in these processes may effect phenotype, cause disease, etc.
- Students will be able to evaluate how genes and the environment can interact to produce a phenotype, including allelic differences and changes in gene regulation.
- Students will be able to describe the concept of deep time, and how comparing genes and genomes allows us to understand evolution and relatedness between species.
- Students will be able to use pedigrees to determine mode of inheritance of a trait.
- Students will be able to describe ethical issues related to modern genomics and implications for health care and insurance, interpersonal relationships, family planning, etc.
- Students will be able to describe high-throughput sequencing, and how it has changed the practice of modern genetics.

Quantitative Literacy, Inquiry & Analysis

- Students will be able to apply the scientific method to examine experimental evidence and draw informed conclusions.
- Students will be able to use graphs to represent scientific data.
- Students will be able to apply statistical methods to interpret scientific data.

Critical Thinking & Problem Solving

- Students will be able to use data to troubleshoot an unexpected outcome .
- Students will be able to apply core knowledge to critically interpret scientific data.

Written Communication

- Students will demonstrate written skills to communicate scientific knowledge and experimental data.

Oral Communication

- Students will be able to demonstrate oral presentation skills to communicate scientific knowledge and experimental data.

Genetics Minor

https://www.unh.edu/program/minor/genetics

Description

Students in other majors who wish to develop a focus in the area of genetics and genomics can complement their major academic program with a minor in genetics.

Requirements

Academic policies related to Minors.

The minor consists of a minimum of 20 credits, completed with a grade of C-minus or better.

Code	Title	Credits
Required		
GEN 604	Principles of Genetics	4
Electives		
Transmission/Population Genetics Courses		
Select one course from the following:		
GEN 705	Population Genetics	3
GEN 725	Population Genetics Lab	2
GEN 706	Human Genetics	4
GEN 713	Microbial Ecology and Evolution	4
GEN 715	Molecular Evolution	4
GEN 772	Evolutionary Genetics of Plants	4
ANSC 612	Genetics of Animals	4
NR 664	Conservation Genetics and Applied Evolution	4
Molecular Genetics Courses		
Select one course from the following:		
GEN 704	Microbial Genetics and Genomics	5
GEN 711	Genomics and Bioinformatics	4
GEN 712	Programming for Bioinformatics	5
GEN 717	Molecular Microbiology	5
GEN 721	Comparative Genomics	4
GEN 771	Molecular Genetics	4
BMCB 754	Molecular Biology Research Methods	5
Additional Courses		
Select two additional elective courses from the above lists.		

A maximum of 4 credits of GEN 795 Investigations in Genetics may be used to fulfill minor requirements.

GeoSpatial Analysis

Programs

- Geospatial Analysis Minor (p. 431)

Geospatial Analysis Minor

https://www.unh.edu/program/minor/geospatial-analysis

Description

The geospatial analysis minor is designed for students who wish to gain additional skills in geographic information systems (GIS), remote sensing, and spatial analysis as they relate to their chosen field of study. Skills and tools gained in this minor include applied statistics, interpreting aerial photography, analyzing spatial data using GIS, and completing projects with interdisciplinary teams.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits).

Code	Title	Credits
Required Courses		
Basic Statistics		
Select one course from the following:		4
BIOL 528	Applied Biostatistics I	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	
Other basic statistics course as approved by minor advisor		
Introductory/Field/or Overview		
Select one course from the following:		4
CEE 404	Surveying and Mapping	
NR 415	Natural Resources Field Methods	
NR 615	Wildlife Habitats	
NR 642	Introduction to Biogeography	
GEOG 591	Making Maps: GIS Fundamentals	
NR 757	Remote Sensing of the Environment	
ANTH 674	Archaeological Survey and Mapping in Belize	
NR 795	Investigations (Field Methods in GIS)	
GIS		
Select one course from the following:		4
NR 658	Introduction to Geographic Information Systems	
NR 760	Geographic Information Systems in Natural Resources	
CEE 796	Special Topics (GIS in Water Resources)	
ESCI 777	GIS for Earth & Environmental Sciences	
Remote Sensing		
Select one course from the following:		4
NR 757	Remote Sensing of the Environment	
NR 759	Digital Image Processing for Natural Resources	
ESCI 778	Remote Sensing Earth & Environmental Sciences	
Advanced Analysis		
Select one course from the following:		4
NR 707	Environmental Modeling	
NR 713	Quantitative Ecology	
NR 740	Inventory and Monitoring of Ecological Communities	
NR 749	Forest Inventory and Modeling	
NR 782	Forest Health in a Changing World	
Total Credits		**20**

Green Real Estate

Programs

- Green Real Estate Minor (p. 431)

Green Real Estate Minor

https://www.unh.edu/program/minor/green-real-estate

Description

The green real estate minor will include the basic fundamentals of real estate (a class which is accredited by the New Hampshire Real Estate Commission). Students will learn about local and regional planning, environmental economics and market forces, and environmental issues as they pertain to real estate. In addition, students may choose complementary classes, such as architecture, surveying, land design, soils, wetland delineation, law, etc.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (18-20 credits).

A minimum grade of C- or better is required in each course, and maintaining a 2.0 average GPA or better.

Code	Title	Credits
Required Courses		
CEP 508	Applied Community Development	4
CEP 672	Fundamentals of Real Estate	4
CEP 673	Green Real Estate	4
Electives		
Select a minimum of 8 credits from the following:		8
CEE 404	Surveying and Mapping	
CEE 700	Building Information Modeling	
CEE 703	Site Design and Project Development	
CEE 705		
CEE 706	Environmental Life Cycle Assessment	
CEE 719	Green Building Design	
CHBE 410	Energy and Environment	
NR 435	Contemporary Conservation Issues and Environmental Awareness	
NR 437	Principles of Sustainability	
NR 507	Introduction to our Energy System and Sustainable Energy	
NR 607		
NR 608	Economics of Sustainability	
NR 753 & NR 754	Sustainability as Abundance and Sense of Place	
NR 756W		
NR 785	Systems Thinking for Sustainable Solutions	
NR 787	Advanced Topics in Sustainable Energy	
Note: The following classes are restricted to Paul College majors only		
FIN 701	Financial Policy	
FIN 702	Investments Analysis	
FIN 608	Real Estate Finance	
MGT 720	Topics in Management II	
Total Credits		**20**

Marine, Estuarine, and Freshwater Biology (MEFB)

The marine, estuarine, and freshwater biology (MEFB) B.S. program is designed to provide a broad background for undergraduates interested in marine, estuarine, and freshwater biology, aquaculture, and fisheries. The program integrates theoretical and practical (hands-on laboratory and field) courses. Students are encouraged to become involved in one or more of the numerous undergraduate research opportunities available in the marine, estuarine, and freshwater sciences.

UNH is located on a seacoast that provides an extraordinary diversity of marine and estuarine habitats. It is also only a short distance from mountain streams, rivers, marshes, bogs, ponds, and lakes. All of the habitats provide outstanding resources for field courses and research. The marine, estuarine, and freshwater faculty are spread across all four departments of the College of Life Sciences and Agriculture. UNH is a Sea Grant university and has an international reputation for teaching and research in aquatic sciences. UNH has aquaculture facilities, and coastal and estuarine research laboratories. In collaboration with Cornell, UNH jointly administers the summer undergraduate programs at the Shoals Marine Laboratory on Appledore Island, seven miles off the coast of New Hampshire and Maine.

https://colsa.unh.edu/biological-sciences

Programs

- Marine, Estuarine and Freshwater Biology Major (B.S.) (p. 432)
- Marine Biology Minor (p. 435)

Faculty

MEFB Program Faculty

Marine, Estuarine and Freshwater Biology Major (B.S.)

https://www.unh.edu/program/bachelor-science/marine-estuarine-freshwater-biology

Description

The major in Marine, Estuarine, and Freshwater Biology is intended to give students interested in the fields of marine and freshwater biology the background and direct hands-on experience needed to pursue productive careers, including potential advanced study. This strategically cross-disciplinary major builds on a broad set of science courses in high-impact areas of study for today's world, represented by a core curriculum in math, chemistry, physics, and biology. The core background is strengthened by a series of required and elective courses in a diverse range of aquatic sciences spanning watersheds to oceans, providing opportunities for study from organismal to ecosystem scales. Designed to provide a solid foundation of knowledge in freshwater, estuarine, and marine biology, the MEFB Major allows flexibility and encourages students to focus on particular areas of interest from molecular biology to ecosystem and policy studies. Students will have the opportunity to specialize in areas of their own interest, such as aquaculture and fisheries, animal behavior, ecological restoration, or management. While MEFB students must complete rigorous course requirements, our students are encouraged to tailor their elective courses within and across departments and colleges as needed to build their own, unique cross-disciplinary path.

The University of New Hampshire is uniquely located for the study of aquatic organisms and their habitats. We are centered between the Great Bay Estuary and the Gulf of Maine, with easy access to diverse marine environments as well as the freshwater habitats of New Hampshire's Lakes Region and the White Mountain National Forest. We boast three Marine Laboratories that provide exceptional opportunities for our student's research and educational needs, including Jackson Estuarine Laboratory (JEL), the Coastal Marine Lab (CML; part of the larger Judd Gregg Marine Research Center), and the Shoals Marine Laboratory (SML), as well as strong affiliations with the Great Bay National Estuarine Research Reserve. While JEL is located on Great Bay in Durham, CML is in nearby New Castle at the Seacoast, and SML is located seven miles off the coast. SML provides summer undergraduate programing with field-based marine courses that fulfill major electives, as well as internships and research opportunities for advanced study. In addition, UNH's campus maintains two fish aquaculture facilities, a world-class genomics laboratory, and the State Veterinary Diagnostic Laboratory, which provide hands-on opportunities for undergraduates. There is also an active diving program with courses at both beginner and advanced levels. A major strength of the MEFB program is the hands-on approach to learning combined with an emphasis on involving undergraduate students in mentored research opportunities.

Off Campus Coursework and Study Abroad Opportunities

It is strongly recommended that students consider participating in a summer, semester, or year-long study abroad program. UNH's Shoals Marine Laboratory, in conjunction with Cornell University, offers a host of marine biology-related college level courses that meet many degree requirements of the MEFB major over the summer on our island campus in the Isles of Shoals. SML offers both Merit and Need-based Scholarships, multi-course discounts, as well as competitive Research Internships offering summer stipends. UNH Global is the definitive resource for Study Abroad opportunities for undergraduates. UNH Global can provide information on programs of study, while students' academic advisors can assist in course selection options that provide equivalencies to requirements in MEFB so progress toward degree is not compromised. In addition, Ecoquest, run by the Department of Natural Resources, offers summer and semester programs of environmentally oriented courses in New Zealand. These are just some of the many opportunities available for MEFB students and we encourage you to explore more.

Pre-health Professional Program

MEFB majors who wish to pursue postgraduate degrees in the health care professions should visit the premed advising website.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A minimum grade of C- is required in all biological science courses that are counted toward the requirements for a degree in MEFB. Students who expect to compete successfully for post-baccalaureate programs should attain a cumulative GPA of 3.0 or higher by the end of the sophomore year and maintain it at that level.

Code	Title	Credits
MEFB Core		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
MEFB 401	Marine Estuarine and Freshwater Biology: Freshmen Seminar	1
MEFB 503	Introduction to Marine Biology	3
MEFB 725	Marine Ecology	3
ZOOL 690	Evolution	4
GEN 604	Principles of Genetics	4
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BMCB 658A	General Biochemistry	3
MATH 424B	Calculus for Life Sciences	4
or BIOL 428	Quantitative Biosciences	
or BIOL 633	Data Analysis for Life Science	
or BIOL 706	Data Science with R for the Life Sciences	
or BIOL 711	Experimental Design & Analysis	
BIOL 528	Applied Biostatistics I	4
PHYS 401	Introduction to Physics I	4
PHYS 402	Introduction to Physics II	4
Choose one Plant Survey course:		
MEFB 625	Introduction to Marine Botany	
MEFB 747	Aquatic Plants in Restoration/Management (C)	
Choose one Systems course:		3-4
MEFB 717	Lake Ecology	
MEFB 755	Biological Oceanography (C)	
ZOOL 708	Stream Ecology (C)	
Choose one Physiology/Function course:		4-5
ZOOL 625 & ZOOL 626W	Principles of Animal Physiology and Animal Physiology Laboratory	
MEFB 773	Physiology of Fishes	
Choose one Animal Survey course:		3-4
MEFB 628	Marine Invertebrate Evolution and Ecology	
MEFB 675	Marine Mammal Biology and Conservation	
ZOOL 542	Ornithology	
ZOOL 566	Herpetology	
ZOOL 710	Sharks and Bony Fishes	
Capstone:		
BIOL 780	Capstone Companion Course	
MEFB Electives [1]		
Select three courses from the following:		
ANSC 701	Physiology of Reproduction	
BIOL 566	Systematic Botany	
BIOL 633	Data Analysis for Life Science	
BIOL 706	Data Science with R for the Life Sciences	
BIOL 720	Plant-Animal Interactions (C)	
BMCB 605	Principles of Cell Biology	
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	
ESCI 501	Introduction to Oceanography	
ESCI 752	Chemical Oceanography	
GEN 713	Microbial Ecology and Evolution	
MARI 705	Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy	
MARI 795W	Crafting Ocean Stories: Research & Writing for the Public in Marine Science & Ocean Engineering	
MEFB 505	Introduction to Applied Science Communication (SML)	
MEFB 506	Marine Parasitology and Disease (SML)	
MEFB 508	Marine Ecosystem Research and Management (SML)	
MEFB 510	Field Ornithology (SML)	
MEFB 530	Evolution and Marine Diversity (SML)	
MEFB 535	Marine Mammal Biology (SML)	
MEFB 545	Field Bioacoustics and Soundscape Ecology (SML)	
MEFB 590	Coastlines in Crisis	
MEFB 625	Introduction to Marine Botany	
MEFB 628	Marine Invertebrate Evolution and Ecology	
MEFB 674	Ecology and Marine Environment (SML)	
MEFB 675	Marine Mammal Biology and Conservation	
MEFB 702	Sustainable Marine Fisheries (SML)	
MEFB 714	Field Animal Behavior (SML)	
MEFB 717	Lake Ecology	
MEFB 741	Sharks: Biology and Conservation (SML)	
MEFB 747	Aquatic Plants in Restoration/Management (C)	
MEFB 751	Research in Biology at the Shoals Marine Lab (SML)	
MEFB 754	Anatomy and Function of Marine Vertebrates (SML)	
MEFB 755	Biological Oceanography (C)	
MEFB 772	Fisheries Biology: Conservation and Management	
MEFB 773	Physiology of Fishes	
NR 504	Freshwater Resources	
NR 703	Watershed Water Quality Management	
NR 712	Mammalogy	
NR 744	Biogeochemistry	
ZOOL 518	Comparative Morphology and Biology of Vertebrates	
ZOOL 542	Ornithology	
ZOOL 566	Herpetology	
ZOOL 610	Principles of Aquaculture	
ZOOL 625 & ZOOL 626W	Principles of Animal Physiology and Animal Physiology Laboratory	
ZOOL 690	Evolution	
ZOOL 710	Sharks and Bony Fishes	
ZOOL 708	Stream Ecology (C)	
ZOOL 733W	Behavioral Ecology (C)	
ZOOL 736	Genes and Behavior (C)	
ZOOL 740	Acoustic Ecology (C)	
ZOOL 777W	Neuroethology (C)	
Research and Special Projects [2]		
Select from the following Courses:		
BIOL 795	Independent Investigations in Biology	
BMS 795	Investigations in Biomedical Science	
BIOL 799H	Honors Senior Thesis (C)	
MEFB 403	Investigative Marine Biology Laboratory (SML)	
MEFB 730	Underwater Research (SML)	
MEFB 751	Research in Biology at the Shoals Marine Lab (SML)	
MEFB 795	Independent Investigations in Marine, Estuarine, and Freshwater Biology	
TECH 797	Undergraduate Ocean Research Project (C) [3]	
MEFB 799H	Honors Senior Thesis in Marine, Estuarine, and Freshwater Biology (C)	

1 A single course cannot be used for both a core requirement and an elective (e.g., ZOOL 542 cannot be used to fulfill the animal survey requirement and as an elective).

2 Primary focus of the project must be Marine, Estuarine and/or Freshwater. A 600, 695, 795, or 799 experience may substitute for one elective with academic advisor approval, but only if taken for at least four credits. These four credits may be spread over multiple semesters if they are consecutive and with the same faculty mentor.

[3] This class requires enrollment in both fall and spring sections, 2 credits/semester for a total of 4 credits.

Capstone Experience

As part of the University of New Hampshire's Discovery Program requirements, all students must complete a capstone experience during their senior year (after earning at least 90 credits). The capstone experience for students majoring in MEFB consists of BOTH (1) an approved individual experience AND (2) the successful completion of the BIOL 780 Capstone Companion Course. Students will not be approved for graduation until capstone certification has been granted.

1) The individual experience

The individual experience may be satisfied through various forms of experiential learning (e.g., Honors thesis, mentored research project, internship) or a course denoted with a "(C)" in the courses listed above. The individual experience must fulfill at least one of the University's capstone criteria:

- synthesizes and applies disciplinary knowledge and skills
- fosters reflection on undergraduate learning and experience
- demonstrates emerging professional competencies
- applies, analyzes, and/or interprets research, data, or artistic expression
- explores areas of interest based on the integration of the prior learning

Before beginning *any* capstone individual experience, students must submit a completed capstone approval form to their Program Coordinator.
Students can obtain this form on the Department's Capstone page or from their Program Coordinator. Here they will describe their proposed individual experience and how it fulfills at least one of the University's capstone criteria listed above. If the student is selecting a "C" course for their individual experience, they should obtain the course syllabus from the instructor for information about the course's content and learning objectives.

2) Enrollment in BIOL 780 Capstone Companion Course

Students will also be required to enroll in BIOL 780 (1 cr.) during the semester of their individual experience. BIOL 780 is offered every Fall and Spring semester.

- If the individual experience is a two-semester thesis, BIOL 780 should be taken during the second semester.
- If the individual experience occurs during the summer (e.g., internship), BIOL 780 should be taken during the Fall semester that immediately follows.
- Note: Because BIOL 780 is not offered during the summer, students cannot complete their individual experience during the summer *and graduate during that same September*. Summer experiences could only be used as individual capstone experiences if completed the summer before the student's senior year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MEFB 401	Marine Estuarine and Freshwater Biology: Freshmen Seminar	1
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing	4
Discovery Course		4
	Credits	**17**
Spring		
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 404	General Chemistry II	4
BIOL 528	Applied Biostatistics I	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
MEFB 503	Introduction to Marine Biology	3
BIOL 633	Data Analysis for Life Science	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
Discovery Course		4
	Credits	**16**
Spring		
BMCB 658A	General Biochemistry	3
GEN 604	Principles of Genetics	4
Discovery Course		4
Discovery Course		4
	Credits	**15**
Third Year		
Fall		
MEFB 625 or MEFB 747	Introduction to Marine Botany or Aquatic Plants in Restoration/ Management	4-5
MEFB 725	Marine Ecology	3
PHYS 401	Introduction to Physics I	4
Discovery Course		4
	Credits	**15-16**
Spring		
ZOOL 690	Evolution	4
ZOOL 625 & ZOOL 626W	Principles of Animal Physiology and Animal Physiology Laboratory	5
PHYS 402	Introduction to Physics II	4
Animal Survey Course		4
	Credits	**17**

Fourth Year		
Fall		
MEFB 755	Biological Oceanography	3
ZOOL 710	Sharks and Bony Fishes	4
Major Elective		4
Capstone		4
	Credits	**15**
Spring		
Major Elective		4
Major Elective		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**127-128**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Show the ability to synthesize diverse sources of information and communicate it effectively.
- Demonstrate a broad understanding of the unique characteristics, as well as the similarities, governing freshwater, estuarine and marine systems.
- Have a broad understanding of biology from the molecular to the ecosystem with a particular appreciation for the abiotic and biotic factors relating to diverse aquatic ecosystems.
- Demonstrate the ability to describe basic principles of scientific inquiry and the importance of scientific study for understanding the natural world.
- Demonstrate the ability to design and experiment, collect data, analyze and graph it appropriately, and summarize the significant findings.
- Demonstrate an ability to critically and objectively evaluate data, develop hypotheses, plus interpret biological experiments and studies.
- Demonstrate an ability to communicate clearly and explicitly, both orally and in writing, following conventional scientific formats.
- Demonstrate a broad understanding of major groups of prokaryotic and eukaryotic aquatic life.

Marine Biology Minor

https://www.unh.edu/program/minor/marine-biology

Description

The Marine Biology minor is designed to provide a foundation in marine biology and related sciences to any UNH undergraduate student, with the exception of students majoring in marine, estuarine, and freshwater biology. It is offered through the Department of Biological Sciences.

Requirements

Academic policies related to Minors.

To fulfill the requirements for the Marine Biology minor, students must complete a minimum of 18 credits across at least five distinct courses.

Code	Title	Credits
Required Course		
MEFB 503	Introduction to Marine Biology	3
Electives		
Select three courses from the following:		
ESCI 501	Introduction to Oceanography	4
ESCI 502	Beaches and Coasts	4
MEFB 506	Marine Parasitology and Disease	4
MEFB 510	Field Ornithology	4
MEFB 530	Evolution and Marine Diversity	4
MEFB 535	Marine Mammal Biology	4
MEFB 590	Coastlines in Crisis	4
MEFB 625	Introduction to Marine Botany	5
MEFB 628	Marine Invertebrate Evolution and Ecology	5
MEFB 674	Ecology and Marine Environment	4
MEFB 675	Marine Mammal Biology and Conservation	3
MEFB 702	Sustainable Marine Fisheries	4
MEFB 714	Field Animal Behavior	4
MEFB 725	Marine Ecology	4
MEFB 741	Sharks: Biology and Conservation	4
MEFB 747	Aquatic Plants in Restoration/Management	4
MEFB 754	Anatomy and Function of Marine Vertebrates	4
MEFB 755	Biological Oceanography	3
MEFB 772	Fisheries Biology: Conservation and Management	4
MEFB 773	Physiology of Fishes	4
ZOOL 610	Principles of Aquaculture	4
ZOOL 710	Sharks and Bony Fishes	4
Select at least one course from the following:		
BIOL 795	Independent Investigations in Biology	4
MARI 533	Basic SCUBA	3
MARI 705	Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy	3
MARI 730	Research Diving Technologies	4
MARI 735	Advanced SCUBA	4
MARI 795W	Crafting Ocean Stories: Research & Writing for the Public in Marine Science & Ocean Engineering	3
MEFB 508	Marine Ecosystem Research and Management	4
MEFB 730	Underwater Research	4
MEFB 751	Research in Biology at the Shoals Marine Lab	4
MEFB 795	Independent Investigations in Marine, Estuarine, and Freshwater Biology	4
ZOOL 795	Independent Investigations in Zoology	4

In addition, students are encouraged to become involved in a research project, either by working in a professor's laboratory or by participating in the Undergraduate Ocean Research Project (TECH 797 Undergraduate Ocean Research Project).

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate an understanding of the unique characteristics of marine systems and the organisms that depend upon them.
- Describe major groups of prokaryotic and eukaryotic marine life.
- Describe biological, chemical, and/or physical processes that are important components of marine ecosystems.
- Demonstrate an understanding of common laboratory, field, and quantitative methods used in marine biology.

- Demonstrate an understanding of how human activities impact the marine environment and how the marine environment impacts human activities.

Microbiology

- Microbiology Major (B.S.) (p. 436)

Microbiology Major (B.S.)

https://www.unh.edu/program/bachelor-science/microbiology

Description

The B.S. in Microbiology program provides a comprehensive scientific education in the study of microorganism. Students will explore the diversity microorganisms, along with their genetics, physiology, and interactions with humans and animals, and the environment. The curriculum is rich with hands-on laboratory experiences, and covers topics such as bacterial pathogenesis, microbial ecology, molecular biology, immunology and virology. Graduates are well prepared for careers in biotechnology, public health, healthcare, food safety, and biological research, as well as for advanced degrees in the biological sciences, medicine and other allied health fields.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Code	Title	Credits
Required Courses		
Foundation Courses		
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
MATH 424B	Calculus for Life Sciences	4
PHYS 401	Introduction to Physics I	4
PHYS 402	Introduction to Physics II	4
Bioscience Core Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BIOL 528	Applied Biostatistics I	4
BMCB 605	Principles of Cell Biology	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
GEN 604	Principles of Genetics	4
Microbiology Core Courses		
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BMS 602 & BMS 603	Pathogenic Microbiology and Pathogenic Microbiology Laboratory	5
BMS 616	Microbial Ecology	3
Major Electives		
Select six major electives from the below list of courses. [1]		
Three electives must include a laboratory (L).		
Three electives must be at the 700-level.		
BMS 623	Histology: Microscopic Cellular Structure and Function	4
BMS 650	Molecular Diagnostics	4
BMS 655	Human and Animal Parasites	3
BMS 703	Infectious Disease and Health	4
BMS 704	Pathologic Basis of Disease	4
BMS 705 & BMS 715	Immunology and Immunology Laboratory (L)	5
BMS 706 & BMS 708	Virology and Virology Laboratory (L)	5
BMS 719	Host-Microbe Interactions (C)	4
BMS 720	Mycology, Parasitology, and Virology	3
BMS 725	Cell Phenotyping and Tissue Engineering Laboratory (C, L)	4
BMS 730	Ethical Issues in Biomedical Science (C)	4
BMS 735	Molecular and Cellular Parasitology (C)	4
BMS 740	Human Microbiome (C, L)	4
BMCB 754	Molecular Biology Research Methods (C, L)	4
BMCB 763	Biochemistry of Cancer	4
GEN 704	Microbial Genetics and Genomics (C, L)	5
GEN 705	Population Genetics	3
GEN 711	Genomics and Bioinformatics	4
GEN 713	Microbial Ecology and Evolution (C)	4
GEN 717	Molecular Microbiology (C, L)	5
GEN 721	Comparative Genomics	4
ANTH 685	Gender, Sexuality and HIV/AIDS in Africa	4
BIOL 510	Mushrooms, Molds, and Mildews: Introduction to the Fungal Kingdom	4
BIOL 633	Data Analysis for Life Science	4
BIOL 704	Plant-Microbe Interactions	3
BIOL 706	Data Science with R for the Life Sciences	4
CEE 724	Environmental Engineering Microbiology (C, L)	4
HMP 501	Epidemiology and Community Medicine	4
MEFB 506	Marine Parasitology and Disease (Shoals Lab)	4
MEFB 717	Lake Ecology	4
MEFB 755	Biological Oceanography	3
NR 641	Wildlife Disease Ecology	4
NR 706	Soil Ecology (C, L)	4
NR 782	Forest Health in a Changing World	4
SOC 635W	Medical Sociology	4

[1] Undergraduate laboratory research taken for 4 credits as BMS 795 Investigations in Biomedical Science, BMS 795W Investigations in Biomedical Science, BMS 799 Senior Thesis, BMS 799H Senior Honors Thesis, INCO 790 Advanced Research Experience or equivalent, may count towards 1 major elective with lab requirements. Students should discuss the experience with their academic advisor to ensure it is appropriate.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MCBS 401	Professional Perspectives in Molecular, Cellular, and Biomedical Sciences	1
BIOL 411	Introductory Biology: Molecular and Cellular	4
ENGL 401	First-Year Writing [1]	4
CHEM 403	General Chemistry I	4
Discovery Course		4
	Credits	**17**
Spring		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
MATH 424B	Calculus for Life Sciences	4
CHEM 404	General Chemistry II	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
GEN 604	Principles of Genetics	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory [2]	5
Discovery Course		4
	Credits	**18**
Spring		
BMS 602 & BMS 603	Pathogenic Microbiology and Pathogenic Microbiology Laboratory	5
BMS 616	Microbial Ecology	3
BIOL 528	Applied Biostatistics I	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
BMCB 605	Principles of Cell Biology	4
PHYS 401	Introduction to Physics I	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
Discovery Course		4
	Credits	**17**
Spring		
PHYS 402	Introduction to Physics II	4
Major Elective		3-4
Major Elective		3-4
Discovery Course		4
	Credits	**14-16**
Fourth Year		
Fall		
Major Elective/Capstone		3-4
Major Elective		3-4
General Elective		4
General Elective		4
	Credits	**14-16**
Spring		
Major Elective		3-4
Major Elective		3-4
General Elective		4
General Elective		4
	Credits	**14-16**
	Total Credits	**126-132**

1 Students applying to health profession schools need a full year of English. ENGL 415C, ENGL 419, ENGL 501, ENGL 502, or ENGL 503 is suggested in addition to ENGL 401. The second course may be taken any semester.

2 Students applying to health profession schools need a full year of Organic Chemistry CHEM 651/CHEM 653 and CHEM 652/CHEM 654 should be taken in place of CHEM 545/CHEM 546.

Student Learning Outcomes

Program Learning Outcomes

Critical Thinking & Problem Solving

- Apply the scientific method to form hypotheses, examine experimental evidence, and draw informed conclusions.
- Apply core knowledge and statistical methods to critically interpret scientific data, and troubleshoot unexpected outcomes.

Quantitative Literacy, Inquiry & Analysis

- Utilize graphs, charts, and tables to represent scientific data.

Oral & Written Communication

- Demonstrate proficiency in the written, oral, and visual communication skills required to convey scientific information.

Core Knowledge in Microbiology

- Compare and contrast cellular and non-cellular microorganisms.
- Explain the basic structure-function relationships of microorganism components, and how specific microbial components contribute to a microorganism's growth and survival.
- Describe how genetic information is maintained and transferred, how mutation can affect viability and contribute to evolution, and how gene expression is regulated.
- Detail how microorganisms interact and influence each other, other organisms, and their environment.
- Understand the principles of microbial pathogenesis and the immune response to infection.
- Analyze and evaluate the complex interactions between microbial communities and their hosts by applying the principles of microbial pathogenesis and microbial ecology.

Neuroscience and Behavior (NSB)

Neuroscience is one of the fastest-growing scientific fields, and the discoveries that are being made today are having an immediate and significant impact on our society. The importance of understanding animal behavior is likewise increasing, particularly in the face of a rapidly-changing environment. The B.S. in Neuroscience and Behavior is a great way for students to combine interests in neurobiology and animal behavior. The curriculum prepares students for various post-graduate

degrees, including medical, veterinary, and graduate school, and we offer students a variety of opportunities to get hands-on research experience.

https://colsa.unh.edu/biological-sciences

Programs

- Animal Behavior Minor (p. 438)
- Neuroscience and Behavior Major (B.S.) (p. 438)

Faculty

College of Liberal Arts Faculty
https://cola.unh.edu/psychology/faculty-staff-directory

College of Life Sciences & Agriculture Faculty
https://colsa.unh.edu/biological-sciences/people

Animal Behavior Minor

https://www.unh.edu/program/minor/animal-behavior

Description

This minor is designed for students who are interested in learning more about animal behavior, including the mechanisms that underlie behaviors and the evolutionary forces that may have shaped them. Students will also gain practical skills in the methods used to study animal behavior in laboratory and field settings.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required		
ZOOL 613W	Animal Behavior	5
Electives		
Minimum of 15 additional credits; At least two of the four electives must come from the Category I list below; the remaining courses may be from either Category I or Category II.		
Category I:		
MEFB 714	Field Animal Behavior	4
NSB 727	Animal Communication	4
PSYC 720	Animal Cognition	4
ZOOL 726	Conservation Behavior	4
ZOOL 733W	Behavioral Ecology	4
ZOOL 736	Genes and Behavior	4
ZOOL 740	Acoustic Ecology	4
ZOOL 777W	Neuroethology	4
ZOOL 795	Independent Investigations in Zoology	1-4
Category II:		
AAS 421	Large Animal Behavior and Handling Techniques	2
BIOL 720	Plant-Animal Interactions	4
BMS 718	Mammalian Physiology	4
PSYC 512	Psychology of Primates	4
ZOOL 625	Principles of Animal Physiology	3
ZOOL 690	Evolution	4

Neuroscience and Behavior Major (B.S.)

https://www.unh.edu/program/bachelor-science/neuroscience-behavior

Description

The major in neuroscience and behavior (NSB) offers an interdisciplinary approach to human and non-human behavior, focusing on the evolution and adaptiveness of certain behaviors, as well as their underlying neural mechanisms. Students who have always been fascinated by how the brain functions will be well served by this major, as will those who love wild animals and wish to better understand their behavior. The B.S. in neuroscience and behavior is based on a solid foundation in biology, chemistry, physics, statistics, and genetics (foundation courses). These are followed by a two-semester course sequence that covers the fundamentals of neuroscience and behavior. Students can then pick five or more electives focusing on areas of interest.

NSB students are encouraged to take advantage of research experiences in the laboratories of the psychology and biology faculty in the program. This provides valuable experience with cutting-edge equipment and techniques. Some students may share aspects of a larger project, whereas others may be relatively independent and design their own project under supervision. In either case, important skills are gained by the discipline of gathering data, analyzing and interpreting it, and presenting it to a broader audience.

The curriculum provides most of the requirements and recommended courses for students seeking admission to graduate school and to professional schools in medicine and veterinary medicine. Students who might choose not to go on to advanced degrees are well-prepared for employment as skilled technicians in research laboratories or, if their interests are in animal behavior, as field research assistants or animal trainers. With additional courses in education, the B.S. in NSB also qualifies graduates to teach at the elementary, junior high, and high school levels.

Faculty participating in the NSB major combine a love of teaching and student mentoring with a passion for research, and encourage student participation. Research facilities that students can use include the Integrative Animal Behavior and Ecoacoustics laboratory, the confocal imaging center, the Hubbard Center for Genomic Studies, and the many marine, freshwater, and estuarine laboratories associated with UNH programs. Students can also take summer courses at the Shoals Marine Laboratory.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.

Major GPA requirements as indicated.

Major Requirements

- Students majoring in NSB are required to take foundation courses in basic science, core courses, and five electives from an extensive list of courses, including some offered by other departments including biochemistry, molecular and cellular biology, and natural resources.
- Minimum grade of D- or better is required in CHEM 403, CHEM 404, CHEM 545/CHEM 546, and PHYS 401; minimum grade of C- or better is required in all other courses.
- A capstone experience is required. This may be independent research, an advanced seminar, or other special student activity. It is meant to integrate prior experience and take the student to a new level in an area of special interest.

Code	Title	Credits
Foundation Courses		
NSB 400	Topics Neuroscience & Behavior	1
BIOL 411 & BIOL 412	Introductory Biology: Molecular and Cellular and Introductory Biology: Evolution, Biodiversity and Ecology (2 semesters)	8
CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II (2 semesters)	8
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
PHYS 401	Introduction to Physics I	4
PSYC 402	Statistics in Psychology	4
or BIOL 528	Applied Biostatistics I	
GEN 604	Principles of Genetics	4
NSB 500 & NSB 501	Fundamentals of Neuroscience and Behavior I and Fundamentals of Neuroscience and Behavior I Laboratory	5
NSB 502 & NSB 503	Fundamentals of Neuroscience and Behavior II/Systems Neuroscience and Fundamentals of Neuroscience and Behavior II Laboratory	5
Electives		
Select five courses from the following:		20-22
BIOL 541W	Ecology	
BIOL 714W	Model Organisms in Biological and Medical Research	
BIOL 775	Plant Rx (C)	
BMCB 605	Principles of Cell Biology	
BMCB 760	Pharmacology	
BMS 507 & BMS 508	Human Anatomy and Physiology I and Human Anatomy and Physiology II [1]	
BMS 702	Endocrinology	
BMS 711		
BMS 718	Mammalian Physiology	
COMM 798	Special Topics (Neural Bases of Cognition and Language, C)	
GEN 706	Human Genetics	
KIN 706 & KIN 707	Neurology and Neurology Lab [1]	
MEFB 714	Field Animal Behavior (SML, C)	
NSB 727	Animal Communication (C)	
PHIL 630	Neuroscience and Philosophy	
PSYC 511	Sensation and Perception	
PSYC 512	Psychology of Primates	
PSYC 513	Cognitive Psychology	
PSYC 521	Behavior Analysis	
PSYC 710	Visual Perception (C)	
PSYC 720	Animal Cognition (C)	
PSYC 731	Brain and Behavior (C)	
PSYC 733	Drugs and Behavior (C)	
PSYC 735	Neurobiology of Mood Disorders (C)	
PSYC 736	Attention Disorders (C)	
PSYC 741W	Special Topics (C) (Approved topics only see footnote) [1]	
ZOOL 613W	Animal Behavior	
ZOOL 625 & ZOOL 626W	Principles of Animal Physiology and Animal Physiology Laboratory [2]	
ZOOL 690	Evolution	
ZOOL 726	Conservation Behavior (C)	
ZOOL 733W	Behavioral Ecology (C)	
ZOOL 736	Genes and Behavior (C)	
ZOOL 740	Acoustic Ecology (C)	
ZOOL 777W	Neuroethology (C)	
795/796 or 799 Independent Study, (C) [3]		
Capstone		
Select from the following options: [4]		
1.) Complete a Capstone designated course (C) from above		
2.) One semester of Capstone Research:		
BIOL 795	Independent Investigations in Biology	
or PSYC 795	Independent Study	
or INCO 790	Advanced Research Experience	
3.) Honor's Thesis:		
NSB 799H	Honors Senior Thesis	
or BIOL 799H	Honors Senior Thesis	
or PSYC 797	Senior Honors Tutorial	
or PSYC 799	Senior Honors Thesis	
4.) Advisor approved alternative		
Total Credits		**69-71**

[1] Must be one of the following approved topics: Fundamentals of Substance Abuse, Neurobiology of Spatial Cognition, Fundamentals of Cognitive Science, Neuroscience of Memory, Behavioral Neuroscience, or Science of Daydreaming.

[2] Both must be taken to count as one of the 5 required major electives

[3] One experience totaling at least 4 credits, but can be earned over the course of two consecutive semesters provided the experience is with the same research mentor. Can only substitute for one elective.

[4] Courses that are eligible to fulfill the Capstone requirement are indicated with a (C) and must be taken senior year. You can: 1) designate a course as a Capstone course, with additional requirements as determined by the instructor; 2) complete one semester of Capstone Research course 3) do an honors thesis in Neuroscience and Behavior or Biology or Psychology or; 4) participate in an alternative activity with approval from the student's academic advisor.

Discovery Program Requirements

NSB majors may use BIOL 411, BIOL 412, CHEM 403, CHEM 404, PHYS 401, PHYS 407 and either PSYC 402 or BIOL 528 to fulfill the Biological Sciences, Physical Sciences, Discovery Lab, and Quantitative Reasoning Discovery requirements.

Additional Information

Students transferring into the NSB program from other UNH majors must hold a cumulative GPA of at least 3.2 at the time of requested major change.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 403	General Chemistry I	4

NSB 400	Topics Neuroscience & Behavior	1
ENGL 401	First-Year Writing (or Discovery Course)	4
Discovery Course		4
	Credits	**17**
Spring		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 404	General Chemistry II	4
BIOL 528 or PSYC 402	Applied Biostatistics I or Statistics in Psychology	4
ENGL 401	First-Year Writing (or Discovery Course)	4
	Credits	**16**
Second Year		
Fall		
NSB 500 & NSB 501	Fundamentals of Neuroscience and Behavior I and Fundamentals of Neuroscience and Behavior I Laboratory	5
NSB Elective 1		4
GEN 604 or PHYS 401	Principles of Genetics or Introduction to Physics I	4
Discovery Course		4
	Credits	**17**
Spring		
NSB 502 & NSB 503	Fundamentals of Neuroscience and Behavior II/Systems Neuroscience and Fundamentals of Neuroscience and Behavior II Laboratory	5
NSB Elective 2		4
GEN 604	Principles of Genetics	4
Discovery Course		4
	Credits	**17**
Third Year		
Fall		
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory (or Spring)	5
NSB Elective 3		4
Discovery/Elective Course		4
Discovery/Elective Course		4
	Credits	**17**
Spring		
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab (or SR Fall)	5
NSB Elective 4		4
Discovery/Elective Course		4
Discovery/Elective Course		4
	Credits	**17**
Fourth Year		
Fall		
NSB Elective 5		4
PHYS 401	Introduction to Physics I	4
Discovery/Elective Course		4
Discovery/Elective Course		4
	Credits	**16**
Spring		
Discovery/Elective Course		4
Discovery/Elective Course		4
Discovery/Elective Course		4
Discovery/Elective Course		4
	Credits	**16**
	Total Credits	**133**

Student Learning Outcomes

Program Learning Outcomes

Students demonstrate that they understand basic principles of neuroscience and behavior.

- Apply the core principles of biology, chemistry, physics, and statistics to more advanced concepts in neuroscience and behavior.
- Apply the principles of evolution and genetics to understand how genotype and phenotype affect the structure and function of animal nervous systems and behavior.
- Describe the basic features of animal nervous system development, organization, signaling, integration, and higher-level processing, and how these are altered in diseases of the nervous system.
- Explain the four levels of analysis emphasized in modern animal behavior research: causation, development, function, and evolution.
- Describe molecular and cellular approaches to the study of brain structure, function, and development, as well as behavioral and cognitive neuroscience approaches to studying higher level brain functions.

Students demonstrate that they can undertake scientifically valid methods of inquiry.

- Apply appropriate research methods, laboratory techniques, and statistical methods to investigate scientific questions in neuroscience and behavior.

Students demonstrate that they can think critically and analytically.

- Read and critique primary research literature related to the nervous system, how nervous system function generates behavior, and how behavior addresses fitness-related challenges across a diversity of species.

Students demonstrate that they can communicate effectively.

- Demonstrate scientific writing skills, and proficiency in delivering oral presentations related to both the primary literature and findings from student investigations in neuroscience and behavior.
- Students practice science responsibly and ethically, and acknowledge the influence of cultural and historical biases in the sciences.

Nutrition (NUTR)

Nutrition is the study of how nutrients and food components function at molecular, cellular, and whole-body levels to impact human health and disease. Students are grounded in fundamental sciences as they develop nutrition-specific competencies in nutrition and health, foods, nutritional assessment, wellness, life cycle nutrition, and/or metabolic biochemistry.

The nutrition degree prepares students for entry-level positions in health care, education, community health, or the biotechnology industry. The

curriculum also supports entry into post-baccalaureate professional programs such as graduate programs in dietetics, medical or dental school, physician associate/physician assistant programs, as well as other graduate or advanced degree programs. Nutrition faculty have expertise in clinical nutrition, community nutrition, and food science, as well as assessing risk factors of chronic disease (i.e. obesity, diabetes, cardiovascular, cognitive) in diverse populations (pediatric, young adult, older adult). Undergraduate students may actively participate in ongoing research projects in these areas.

Students pursuing the B.S. degree in Nutrition choose from one of three areas of specialization: Dietetics, Health and Wellness, or Nutritional Sciences.

The curriculum for the Dietetics option is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). Students who complete the B.S. in Nutrition with the Dietetics option are eligible to apply for a masters degree and dietetic internship, a prerequisite for becoming a registered dietitian.

Students who complete the Health and Wellness option are prepared for jobs in agencies or businesses that have an emphasis on health and wellness, including schools, fitness centers, and non-profit or community organizations. They are also well prepared for various graduate schools and advanced degree programs.

Students in the Nutritional Sciences option often enroll in a post-graduate degree program (e.g., medical school, graduate school, physician associate/physician assistant program, etc.) or enter the biomedical/biotechnology workplace.

Pre-Professional Health Programs

Students interested in postgraduate careers in the health care professions should visit UNH's Pre-Professional Health Programs Advising Office. Requirements for specific types of professional schools (e.g., medical, dental, physician associate/physician assistant, pharmacy, etc.) are also provided by the Pre-Professional Health Advising Office. While many of the prerequisite courses required by professional schools are also requirements of the Nutrition major, you should consult with your advisor to create a plan of study that best prepares you for pursuing a career in one of these health professions.

https://colsa.unh.edu/agriculture-nutrition-food-systems

Programs

- Culinary Nutrition and Food Studies Minor (p. 441)
- Nutrition Major (B.S.) (p. 441)
- Nutrition Major: Dietetics Option (B.S.) (p. 442)
- Nutrition Major: Health and Wellness Option (B.S.) (p. 444)
- Nutrition Major: Nutritional Sciences Option (B.S.) (p. 446)
- Nutrition Minor (p. 448)

Faculty

Nutrition Program Faculty

Culinary Nutrition and Food Studies Minor

https://www.unh.edu/program/minor/culinary-nutrition-and-food-studies

Description

The Culinary Nutrition & Food Studies Minor provides students the ability to explore the foundation of nutritional sciences and gain a practical appreciation of the culinary arts while building an understanding of our food environment & culture as it applies to human health. The minor offers students hands-on learning experiences in culinary arts and the flexibility to incorporate study abroad coursework via the UNH in Italy program.

The minor may be of interest to students preparing for future careers in allied health or health promotion and who recognize the growing need for training in culinary nutrition. Dietitians, physicians, wellness coaches, nurses, and other health care providers with strong culinary skills will likely be better equipped to empower clients to choose and prepare healthier food choices.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits).

Code	Title	Credits
Required Courses		
NUTR 400	Nutrition in Health and Well Being	4
NUTR 403	Culinary Arts Skills Development	4
Electives		
Food Studies		
Select two courses from the following:		8
NUTR 405	Food and Society	
NUTR 525	Food and Culture in Italy	
NUTR 530	Critical Analysis in Food Studies	
NUTR 550	Food Science: Principle and Practice	
NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	
NUTR 704	Managerial Skills in Dietetics	
AGFS 415	The Science of Fermentation: A Culinary Journey from Bread to Beer	
AGFS 620	Food Systems & Community Resilience	
ECOG 401	Introduction to Ecogastronomy	
HMGT 570	International Food and Culture	
HMGT 771	International Wine and Beverage	
Practicum		
NUTR 628	Culinary Nutrition Practicum	4
Total Credits		**20**

Nutrition Major (B.S.)

https://www.unh.edu/program/bachelor-science/nutrition

Description

Nutrition is the study of food, the nutrients found in food, and the body's metabolism of these nutrients to maintain and promote health. Nutrition is an interdisciplinary science based on biochemistry and physiology, but also integrates sociology, psychology, molecular biology, and genetics.

Students have three curriculum options within the major to pursue a bachelor's degree in nutrition. The option is declared within the nutrition major before the end of the second year in the program. Options include:

- **Dietetics option** - is the first step to becoming a registered dietitian. The Didactic Program in Dietetics (DPD) curriculum is accredited by The Accreditation Council for Education in Nutrition and Dietetics (ACEND). It prepares you for a master's degree and dietetic internship.
- **Health and Wellness option** - provides a foundation in chemistry, anatomy, physiology and microbiology and includes courses on wellness and community health. Students gain real-world experience providing hands-on nutrition and health guidance.
- **Nutritional Sciences option** - provides a comprehensive background in biology, chemistry, physiology, nutrition, and biochemistry, and includes courses on nutritional assessment, life cycle nutrition, nutrition and health, and careers in nutrition.

The program prepares students for success by offering real-world learning opportunities throughout the curriculum. These opportunities include applied research, field experiences, internships, community engagement, and study abroad offerings. Our diverse group of faculty are dedicated to student success in and outside of the classroom. Coursework supports diverse postgraduate pathways including allied health programs, medical and dental schools, and graduate school. The rigorous curriculum is designed to offer a science-based foundation and foster critical-thinking and strong communication skills for future professional success of our students.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students take 16-18 credits per semester. All students complete foundational courses in the sciences, nutrition core courses, and additional option-specific requirements as noted in the program descriptions (i.e. Dietetics, Nutrition and Wellness, and Nutritional Sciences). Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well.

Code	Title	Credits
NUTR courses:		
NUTR 400	Nutrition in Health and Well Being	4
NUTR 401	Professional Perspectives on Nutrition	1
NUTR 476	Nutritional Assessment	4
NUTR 650	Life Cycle Nutrition	4
Foundation courses:		
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
SOC 400	Introductory Sociology	4
or PSYC 401	Introduction to Psychology	
Statistics course (choose one):		4
BIOL 528	Applied Biostatistics I	
HMP 540	Statistics for Health and Human Service Professionals	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	

Student Learning Outcomes

Student Learning Outcomes are outlined within the Nutrition Major program options pages, see:

- Nutrition: Dietetics Option (B.S.)
- Nutrition: Health and Wellness Option (B.S.)
- Nutrition: Nutritional Sciences Option (B.S.)

Nutrition Major: Dietetics Option (B.S.)

https://www.unh.edu/program/bachelor-science/nutrition-dietetics

Description

Nutrition is the study of how nutrients and food components function at molecular, cellular, and whole-body levels to impact human health and disease. Students are grounded in fundamental sciences as they develop nutrition-specific competencies in nutrition and health, foods, nutritional assessment, wellness, life cycle nutrition, and metabolic biochemistry.

The nutrition program prepares students for entry-level positions in health care, education, research, or the biotechnology industry, or entry into post-baccalaureate graduate and professional programs. Nutrition faculty have expertise in clinical nutrition, telehealth, epidemiology, and food science, as well as assessing risk factors of chronic disease (i.e. obesity, diabetes, cardiovascular, cognitive) in diverse populations (pediatric, young adult, older adult).

The curriculum for the Dietetics option is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). Students who complete the B.S. in Nutrition with the Dietetics option are eligible to apply for a masters degree and dietetic internship, a prerequisite for becoming a registered dietitian.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A grade of C-minus or better must be earned in all NUTR courses required by the major.

Code	Title	Credits
Foundation Courses		
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
SOC 400	Introductory Sociology	4
or PSYC 401	Introduction to Psychology	
Select one statistics course from the following:		4
BIOL 528	Applied Biostatistics I	
HMP 540	Statistics for Health and Human Service Professionals	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	

Code	Title	Credits
Science Core Courses		
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
BMS 501	Microbes in Human Disease	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BMCB 658	General Biochemistry	3

Code	Title	Credits
Nutrition Core Courses		
NUTR 400	Nutrition in Health and Well Being	4
NUTR 401	Professional Perspectives on Nutrition	1
NUTR 476	Nutritional Assessment	4
NUTR 650	Life Cycle Nutrition	4

Code	Title	Credits
Dietetics Option Courses		
NUTR 403	Culinary Arts Skills Development	4
NUTR 550	Food Science: Principle and Practice	4
NUTR 610	Nutrition Education and Counseling	4
NUTR 700	Career Development in Dietetics	2
NUTR 704	Managerial Skills in Dietetics	4
NUTR 720	Community Nutrition	4
NUTR 750	Nutritional Biochemistry	4
NUTR 773	Clinical Nutrition	4
NUTR 775	Practical Applications in Medical Nutrition Therapy	4
NUTR 780	Critical Issues in Nutrition	4
HMP 401	United States Health Care Systems	4

Dietetics Capstone Experience

One capstone experience, supervised and approved within the major, is required of all seniors. The capstone explores areas of interest based on the integration of prior learning. The capstone requirement for Dietetics students is satisfied through the completion of NUTR 720 Community Nutrition or NUTR 780 Critical Issues in Nutrition during their senior year.

Both NUTR 720 and NUTR 780 are required courses; one of these courses must be taken during the student's senior year to fulfill the university's capstone requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
NUTR 400	Nutrition in Health and Well Being	4
NUTR 401	Professional Perspectives on Nutrition	1
BMS 507	Human Anatomy and Physiology I	4
SOC 400 or PSYC 401	Introductory Sociology or Introduction to Psychology	4
ENGL 401	First-Year Writing	4
	Credits	**17**
Spring		
NUTR 476	Nutritional Assessment	4
BMS 508	Human Anatomy and Physiology II	4
HMP 401	United States Health Care Systems	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
CHEM 403	General Chemistry I	4
NUTR 403	Culinary Arts Skills Development	4
Select one of the following:		4
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	
BIOL 528	Applied Biostatistics I	
HMP 540	Statistics for Health and Human Service Professionals	
Inquiry Course		4
	Credits	**16**
Spring		
CHEM 404	General Chemistry II	4
NUTR 650	Life Cycle Nutrition	4
Discovery Course		4
Elective (any course)		4
	Credits	**16**
Third Year		
Fall		
NUTR 550	Food Science: Principle and Practice	4
NUTR 610	Nutrition Education and Counseling	4
BMS 501	Microbes in Human Disease	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
	Credits	**17**
Spring		
NUTR 600	Field Experience in Nutrition	2
NUTR 773	Clinical Nutrition	4
BMCB 658	General Biochemistry ((no lab required))	3
Discovery Course		4
Elective (any course)		3-4
	Credits	**16-17**
Fourth Year		
Fall		
NUTR 700	Career Development in Dietetics	2
NUTR 750	Nutritional Biochemistry	4

NUTR 775	Practical Applications in Medical Nutrition Therapy	4
Discovery Course		4
Elective (any course)		1-4
	Credits	**15-18**
Spring		
NUTR 704	Managerial Skills in Dietetics	4
NUTR 720	Community Nutrition	4
NUTR 780	Critical Issues in Nutrition	4
Elective (any course)		3-4
	Credits	**15-16**
	Total Credits	**128-133**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions.
- Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols.
- Apply critical thinking skills.
- Demonstrate effective and professional oral and written communication and documentation.
- Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics.
- Assess the impact of a public policy position on nutrition and dietetics practice.
- Discuss the impact of health care policy and different health care delivery systems on food and nutrition services.
- Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates.
- Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity, and inclusion.
- Describe contributing factors to health inequity in nutrition and dietetics including structural bias, social inequities, health disparities and discrimination.
- Participate in a nutrition and dietetics professional organization and explain the significant role of the organization.
- Defend a position on issues impacting the nutrition and dietetics profession.
- Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions.
- Develop an educational session or program/educational strategy for a target population.
- Demonstrate counseling and education methods to facilitate behavior change and enhance wellness for diverse individuals and groups.
- Practice routine health screening assessments, including measuring blood pressure and conducting waived point-of-care laboratory testing (such as blood glucose or cholesterol).
- Describe concepts of nutritional genomics and how they relate to medical nutrition therapy, health, and disease.
- Develop nutritionally sound meals, menus and meal plans that promote health and disease management and meet client's/patient's needs.
- Apply management theories to the development of programs or services.
- Evaluate a budget/financial management plan and interpret financial data.
- Demonstrate an understanding of the regulation system related to billing and coding, what services are reimbursable by third party payers, and how reimbursement may be obtained.
- Apply the principles of human resource management to different situations.
- Apply safety and sanitation principles related to food, personnel, and consumers.
- Explain the processes involved in delivering quality food and nutrition services.
- Evaluate data to be used in decision-making for continuous quality improvement.
- Perform self-assessment that includes awareness in terms of learning and leadership styles and cultural orientation and develop goals for self-improvement.
- Identify and articulate one's skills, strengths, knowledge and experiences relevant to the position desired and career goals.
- Practice how to self-advocate for opportunities in a variety of settings (such as asking for needed support, presenting an elevator pitch).
- Practice resolving differences or dealing with conflict.
- Promote team involvement and recognize the skills of each member.
- Demonstrate an understanding of the importance and expectations of a professional in mentoring and precepting others.

Nutrition Major: Health and Wellness Option (B.S.)

https://www.unh.edu/program/bachelor-science/nutrition-health-wellness

Description

Nutrition is the study of how nutrients and food components function at molecular, cellular, and whole-body levels to impact human health and disease. Students are grounded in fundamental sciences as they develop nutrition-specific competencies in nutrition and health, foods, nutritional assessment, wellness, life cycle nutrition, and/or metabolic biochemistry.

The nutrition program prepares students for entry-level positions in health care, education, research, or the biotechnology industry, or entry into post-baccalaureate professional programs. Nutrition faculty have expertise in clinical nutrition, telehealth, epidemiology, and food science, as well as assessing risk factors of chronic disease (i.e. obesity, diabetes, cardiovascular, cognitive) in diverse populations (pediatric, young adult, older adult).

Students who complete the Health and Wellness option are prepared for jobs in agencies or businesses that have an emphasis on disease prevention and health promotion, including schools, employee wellness agencies, fitness centers, and non-profit or community organizations. They are also prepared for entry into post-baccalaureate graduate and professional programs.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A minimum grade of C-minus or better must be earned in all NUTR courses required by the major.

Code	Title	Credits
Foundation Courses		
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
SOC 400	Introductory Sociology	4
or PSYC 401	Introduction to Psychology	
Select one statistics course from the following:		4
BIOL 528	Applied Biostatistics I	
HMP 540	Statistics for Health and Human Service Professionals	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	
Science Core Courses		
CHEM 411	Introductory Chemistry for Life Sciences	4
or CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	
BMS 501	Microbes in Human Disease	4
BMCB 501	Biological Chemistry	4
Nutrition Core Courses		
NUTR 400	Nutrition in Health and Well Being	4
NUTR 401	Professional Perspectives on Nutrition	1
NUTR 476	Nutritional Assessment	4
NUTR 650	Life Cycle Nutrition	4
Nutrition and Wellness Option Courses		
NUTR 403	Culinary Arts Skills Development	4
NUTR 506	Nutrition and Wellness	4
NUTR 546	Nutrition in Exercise and Sports	4
NUTR 610	Nutrition Education and Counseling	4
NUTR 720	Community Nutrition	4
NUTR 755	Concepts and Controversies in Weight Management	3
NUTR 758	Practicum in Nutrition and Wellness	2
HMP 401	United States Health Care Systems	4
Electives		
Select NUTR elective		4
Select 600-level or 700-level elective		4-5

Nutrition and Wellness Capstone Experience

One capstone experience, supervised and approved within the major, is required of all seniors. The capstone explores areas of interest based on the integration of prior learning. The capstone requirement for Wellness students is satisfied through the completion of NUTR 720 Community Nutrition or NUTR 755 Concepts and Controversies in Weight Management during their senior year.

Both NUTR 720 and NUTR 755 are required courses; one of these courses must be taken during the student's senior year to fulfill the university's capstone requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
NUTR 400	Nutrition in Health and Well Being	4
NUTR 401	Professional Perspectives on Nutrition	1
BMS 507	Human Anatomy and Physiology I	4
SOC 400 or PSYC 401	Introductory Sociology or Introduction to Psychology	4
ENGL 401	First-Year Writing	4
	Credits	**17**
Spring		
NUTR 476	Nutritional Assessment	4
BMS 508	Human Anatomy and Physiology II	4
HMP 401	United States Health Care Systems	4
Discovery course		4
	Credits	**16**
Second Year		
Fall		
CHEM 411	Introductory Chemistry for Life Sciences	4
NUTR 403	Culinary Arts Skills Development	4
Inquiry course		4
Elective		4
	Credits	**16**
Spring		
NUTR 506	Nutrition and Wellness	4
BMCB 501	Biological Chemistry	4
Select one of the following:		4
BIOL 528	Applied Biostatistics I	
PSYC 402	Statistics in Psychology	
HMP 540	Statistics for Health and Human Service Professionals	
SOC 402	Statistics	
Elective (WI)		4
	Credits	**16**
Third Year		
Fall		
NUTR 546	Nutrition in Exercise and Sports	4

NUTR 610	Nutrition Education and Counseling	4
BMS 501	Microbes in Human Disease	4
NUTR Elective or Discovery Course		4
	Credits	**16**
Spring		
NUTR 650	Life Cycle Nutrition	4
NUTR Elective or Discovery Course		4
Elective (any course)		4
Elective (any course)		4
	Credits	**16**
Fourth Year		
Fall		
NUTR 755	Concepts and Controversies in Weight Management	3
NUTR 758	Practicum in Nutrition and Wellness	2
Discovery Course		4
Discovery Course or Elective		4
600-Level or 700-Level Elective or Elective (any course)		3-4
	Credits	**16-17**
Spring		
NUTR 720	Community Nutrition	4
600-level or 700-level Elective		4
Discovery Course		4
Elective (any course)		3-4
	Credits	**15-16**
	Total Credits	**128-130**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Locate, interpret, evaluate and use professional literature to make ethical, evidence-based conclusions and decisions.
- Apply critical thinking skills.
- Deliver effective and professional oral and written communication.
- Demonstrate cultural humility, awareness of personal biases and an understanding of cultural difference they contribute to diversity, equity, and inclusion.
- Articulate aspects of nutrition and wellness for various populations across the lifespan.
- Discuss the impact of policies and guidelines on food and nutrition services.

Nutrition Major: Nutritional Sciences Option (B.S.)

https://www.unh.edu/program/bachelor-science/nutrition-nutritional-sciences

Description

Nutrition is the study of how nutrients and food components function at molecular, cellular, and whole-body levels to impact human health and disease. Students are grounded in fundamental sciences as they develop nutrition-specific competencies in nutrition and health, foods, nutritional assessment, wellness, life cycle nutrition, and metabolic biochemistry.

The nutrition program prepares students for entry-level positions in health care, education, research, or the biotechnology industry, or entry into post-baccalaureate graduate and professional programs. Nutrition faculty have expertise in clinical nutrition and food science, as well as assessing risk factors of chronic disease (i.e. obesity, diabetes, cardiovascular, cognitive) in diverse populations (pediatric, young adult, older adult), and populations that are underrepresented in research.

Students in the Nutritional Sciences option often enroll in a post-graduate educational degree programs (e.g., medical school, graduate school, physician assistant program, etc.) or enter the biomedical/biotechnology workplace.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A minimum grade of C- or above is required in all NUTR courses required by the major.

Code	Title	Credits
Foundation Courses		
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
SOC 400	Introductory Sociology	4
or PSYC 401	Introduction to Psychology	
Select one statistics course from the following:		4
BIOL 528	Applied Biostatistics I	
HMP 540	Statistics for Health and Human Service Professionals	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	
Science Core Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
GEN 604	Principles of Genetics	4
Nutrition Core Courses		
NUTR 400	Nutrition in Health and Well Being	4
NUTR 401	Professional Perspectives on Nutrition	1
NUTR 476	Nutritional Assessment	4
NUTR 650	Life Cycle Nutrition	4

Nutritional Sciences Option Courses		
MATH 424B	Calculus for Life Sciences	4
NUTR 750	Nutritional Biochemistry	4
NUTR 751	Nutritional Biochemistry of Micronutrients	4
Major Elective Courses		
Two nutrition Electives and a third Elective outside the major are chosen in consultation with the student's advisor, based on the student's career interests.		
Select two NUTR courses (minimum 8 credits)		
NUTR 403	Culinary Arts Skills Development	4
NUTR 405	Food and Society	4
NUTR 506	Nutrition and Wellness	4
NUTR 525	Food and Culture in Italy	4
NUTR 530	Critical Analysis in Food Studies	4
NUTR 535	History of Food in Italy	4
NUTR 546	Nutrition in Exercise and Sports	4
NUTR 550	Food Science: Principle and Practice	4
NUTR 560	Introduction to Research in Nutrition	2
NUTR 595	Mediterranean Diet and Culture	4
NUTR 600	Field Experience in Nutrition	1-4
NUTR 610	Nutrition Education and Counseling	4
NUTR 625	From Farm to the Italian Table	4
NUTR 704	Managerial Skills in Dietetics	4
NUTR 709	Nutritional Epidemiology	4
NUTR 710	Advanced Diabetes Care	2
NUTR 715	Advanced Sports Nutrition	4
NUTR 720	Community Nutrition	4
NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	4
NUTR 740	Nutrition for Children with Special Needs	4
NUTR 755 & NUTR 758	Concepts and Controversies in Weight Management and Practicum in Nutrition and Wellness	5
NUTR 773	Clinical Nutrition	4
NUTR 775	Practical Applications in Medical Nutrition Therapy	4
NUTR 780	Critical Issues in Nutrition	4
NUTR 790	Undergraduate Teaching Experience	1-2
NUTR 799H	Honors Senior Thesis	1-8
Select an additional elective outside the Major at 600- or 700-Level		*4*

Nutritional Science Capstone Experience

One capstone experience, supervised and approved within the major, is required of all seniors. The capstone explores areas of interest based on the integration of prior learning. The capstone requirement for Nutritional Sciences students is satisfied through the completion of NUTR 720 Community Nutrition or NUTR 751 Nutritional Biochemistry of Micronutrients.

NUTR 751 is a required course; and will only fulfill the university's capstone requirement if taken during the student's senior year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
NUTR 400	Nutrition in Health and Well Being	4
NUTR 401	Professional Perspectives on Nutrition	1
ENGL 401	First-Year Writing	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 403	General Chemistry I	4
	Credits	**17**
Spring		
NUTR 476	Nutritional Assessment	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 404	General Chemistry II	4
MATH 424B	Calculus for Life Sciences	4
	Credits	**16**
Second Year		
Fall		
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BMS 507	Human Anatomy and Physiology I	4
Select one of the following:		4
BIOL 528	Applied Biostatistics I	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	
HMP 540	Statistics for Health and Human Service Professionals	
Discovery Course		4
	Credits	**17**
Spring		
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BMS 508	Human Anatomy and Physiology II	4
SOC 400 or PSYC 401	Introductory Sociology or Introduction to Psychology	4
Elective (any course)		4
	Credits	**17**
Third Year		
Fall		
GEN 604	Principles of Genetics	4
Nutrition Elective		2-4
Discovery Course		4
Elective (any course)		4
	Credits	**14-16**
Spring		
NUTR 650	Life Cycle Nutrition	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
Discovery Course		4
Nutrition Elective		2-4
	Credits	**15-17**
Fourth Year		
Fall		
NUTR 750	Nutritional Biochemistry	4
Discovery Course		4
Elective (any course)		4
Elective (any course)		4
	Credits	**16**
Spring		
NUTR 751	Nutritional Biochemistry of Micronutrients	4
600 or 700-Level Elective Outside the Major		4
Discovery Course		4

Elective (any course)	4
Credits	**16**
Total Credits	**128-132**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Locate, interpret, evaluate and use professional literature to make ethical, evidence-based conclusions and decisions.
- Apply critical thinking skills.
- Deliver effective and professional oral and written communication.
- Demonstrate cultural humility, awareness of personal biases and an understanding of cultural difference they contribute to diversity, equity, and inclusion.
- Articulate the nutritional requirements for various populations across the lifespan.
- Explain macronutrient and micronutrient metabolism.
- Demonstrate an understanding of the scientific method and how it is used to generate knowledge in nutrition science.

Nutrition Minor

https://www.unh.edu/program/minor/nutrition

Description

The nutrition minor is particularly suited to students interested in pursuing professional careers related to human health and wellness.

Requirements

Academic policies related to Minors.

- The minor consists of completing a minimum of 20 credits.

Code	Title	Credits
Required Course		
NUTR 400	Nutrition in Health and Well Being	4
Electives [1]		
Select a minimum of 16-credits from the following courses: (At least 4-credits must be at the 600- or 700-level)		
NUTR 403	Culinary Arts Skills Development	4
NUTR 405	Food and Society	4
NUTR 476	Nutritional Assessment	4
NUTR 506	Nutrition and Wellness	4
NUTR 525	Food and Culture in Italy	4
NUTR 530	Critical Analysis in Food Studies	4
NUTR 535	History of Food in Italy	4
NUTR 546	Nutrition in Exercise and Sports	4
NUTR 550	Food Science: Principle and Practice	4
NUTR 560	Introduction to Research in Nutrition	2
NUTR 595	Mediterranean Diet and Culture	4
NUTR 610	Nutrition Education and Counseling	4
NUTR 625	From Farm to the Italian Table	4
NUTR 628	Culinary Nutrition Practicum	4
NUTR 650	Life Cycle Nutrition	4
NUTR 699	Independent Study	1-4
NUTR 704	Managerial Skills in Dietetics	4
NUTR 709	Nutritional Epidemiology	4
NUTR 710	Advanced Diabetes Care	2
NUTR 715	Advanced Sports Nutrition	4
NUTR 720	Community Nutrition	4
NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	4
NUTR 740	Nutrition for Children with Special Needs	4
NUTR 750	Nutritional Biochemistry	4
NUTR 751	Nutritional Biochemistry of Micronutrients	4
NUTR 755	Concepts and Controversies in Weight Management	3
NUTR 758	Practicum in Nutrition and Wellness	2
NUTR 773	Clinical Nutrition	4
NUTR 790	Undergraduate Teaching Experience	1-2
NUTR 795	Investigations	1-4

[1] Students can customize the Nutrition minor to align with their personal interests or professional goals. Please note that many courses have prerequisites and/or require special permission.

Sustainable Energy

- Sustainable Energy Minor (p. 448)

Sustainable Energy Minor

https://www.unh.edu/program/minor/sustainable-energy

Description

The Minor in Sustainable Energy provides the flexibility and focus that allows for students to expand their exposure to the topic within the context of their own major. The goal of the program is to match the developing nature of the field with the skills needed to understand sustainable energy in the greater context of its opportunities and challenges. Courses in the minor will build on existing competencies and create an experience that provides an exposure to new the perspectives and conceptual framework that is at the core of the developing field of sustainable energy.

Objectives

The objectives of the Minor in Sustainable Energy are to provide students with the educational experience necessary to participate in one of the fastest growing fields of employment. Coupled with an ability to focus on meaningful employment, is our challenge to confront a changing climate; students will be given an opportunity to be a part of the solution.

Curriculum and Requirements

The curriculum and requirements for the minor are based on exposure to three competencies that reflect the exposure necessary to grasp the basic understanding of sustainable energy:

- Technical – Requires a basic understanding of the grid, energy flow, energy usage and the technologies of efficiency, generation and management of energy and generation sources.
- Economics and Finance – Requires a basic understanding of utility structure, energy markets and utility rate-making. An additional focus includes the business aspect of financing and projecting the cost-effectiveness of energy generation sources and fuels – including the development of innovative business models for deploying sustainable energy.
- Policy – Requires a basic understanding in policy-making and implementation, including a historic perspective of our utilities, incentives and subsidies and their impact on market forces. An additional focus includes the policy impacts of aspects related

to sustainable energy deployment, including, interconnection, net metering and feed in tariffs and tax incentives.

Requirements

Academic policies related to Minors.

- Appropriate course substitutes from other study-abroad programs may also be used with permission.

Code	Title	Credits
Required Courses		
Introduction:		
NR 507	Introduction to our Energy System and Sustainable Energy	4
Critical Thinking:		
NR 606	International Energy Topics	3-4
or CEE 505	Introduction to Sustainable Engineering	
Competency:		
NR 787	Advanced Topics in Sustainable Energy	4
Elective Courses		
Technology/Engineering Category		
Select one course from the following:		3-4
CHBE 410	Energy and Environment	
CEE 520	Environmental Pollution and Protection: A Global Context	
CEE 719	Green Building Design	
Social & Economic Policy Category		
Select one course from the following:		4
CEP 673	Green Real Estate	
NR 572	Introduction to Natural Resource Economics	
NR 602	Natural Resources and Environmental Policy	
NR 606	International Energy Topics	
NR 767W	Social Impact Assessment	
SOC 565	Environment and Society	
Total Credits		**18-20**

Sustainability Dual Major

UNH is a proud national leader in sustainability. From our low-carbon campus, to our Green Restaurant dining halls and community, belonging, access, and inclusion initiatives, UNH is the place to study and live sustainability. The Sustainability Dual Major (SDM) is a unique transdisciplinary program that enhances the value of your degree with real-world problem solving and systems thinking skills highly sought after in today's workplace. We support and encourage students to understand and address today's most pressing challenges like climate change, poverty, hunger, and biodiversity loss (to name just a few), with hands-on experiences through coursework, internships, fellowships and more. UNH is the perfect place to jumpstart your career and become an agent of change in a complex world.

Programs

- Sustainability Dual Major (p. 449)

Faculty

Sustainability Dual Major Faculty

See Faculty Directory menu under the 'Explore Program Details' section.

Sustainability Dual Major

https://www.unh.edu/program/dual-major/sustainability

Description

The sustainability dual major is a unique opportunity to enhance your impact and the value of your degree. As a science and practice, sustainability seeks solutions to our world's greatest challenges while ensuring social, economic, and environmental wellbeing at local to global scales. You can pair the dual major with any other major on campus, developing the knowledge and skills you'll need to problem-solve and create a world where people and nature can thrive – now and in the future.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes, if primary major is a Bachelor of Arts

Declared Primary Major

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Sustainability Dual Major Requirements

The dual major requires 32 credits, including core and elective courses, and a capstone experience.

Code	Title	Credits
Required Courses		
SUST 401	Exploring Sustainability	4
SUST 501	Sustainability in Action	4
SUST 750	Sustainability Capstone	4
Electives		
Select 20 credits of elective courses from the below list. [1]		20
Total Credits		**32**

[1] All SUST majors will take at least one (1) elective course from the natural & biological sciences list and at least one (1) elective course from the social science and humanities list.

Code	Title	Credits
APPROVED ELECTIVE COURSES		
Natural Biological Systems		
AGFS 405	Sustainable Agriculture and Food Production	4
AGFS 410	A Taste of the Tropics	4
AGFS 502	Agroecology	4
AGFS 632	Urban Agriculture	4
BIOL 541W	Ecology	4
CEE 505	Introduction to Sustainable Engineering	3
CEE 520	Environmental Pollution and Protection: A Global Context	4
CEE 706	Environmental Life Cycle Assessment	3

CEE 719	Green Building Design	3
CEP 673	Green Real Estate	4
CHEM 408	Green Goggles: Introduction to Green Chemistry	4
ECOG 401	Introduction to Ecogastronomy	4
ESCI 405	Global Environmental Change	4
ESCI 409	Geology and the Environment	4
GEOG 550	Sub-Saharan Africa: Environmental Politics and Development	4
GEOG 560	Natural Hazards and Human Disasters	4
GEOG 574	Global Landscapes and Environmental Processes	4
ESCI 502	Beaches and Coasts	4
ESCI 765	Paleoclimatology	3
GEOG 572	Geography of the Natural Environment	4
GEOG 670	Climate and Society	4
HLS 580	Environmental and Human Security	4
MARI 705	Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy	3
ME 706	Renewable Energy: Physical and Engineering Principles	3
MEFB 702	Sustainable Marine Fisheries	4
MEFB 772	Fisheries Biology: Conservation and Management	4
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
NR 507	Introduction to our Energy System and Sustainable Energy	4
NR 650	Principles of Conservation Biology	4
NR 660	Ecology and Biogeography of New Zealand	5
NR 661	Restoration Ecology and Ecosystem Management in New Zealand	4
NR 663	Applied Directed Research in New Zealand	4
NR 703	Watershed Water Quality Management	4
NR 785	Systems Thinking for Sustainable Solutions	4
NUTR 595	Mediterranean Diet and Culture	4
NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	4
SUST 600	Sustainability Independent Study	1-4
SUST 605	Sustainability Internship	1-4
Social Systems & Humanities		
ADMN 401W	Introduction to Responsible Business Management	4
AGFS 620	Food Systems & Community Resilience	4
AGFS 690	Agricultural and Food Policy	4
AGFS 750	Food System Solutions; Increasing Sustainability and Equity	4
ANTH 530	Multispecies Planet: Animals, Plants, and Landscapes Across Cultures	4
ANTH 645	Cultural Sustainability and the Role of Public Archaeology	4
ANTH 695	Globalization and Global Population Health	4
ANTH 697	Special Topics	4
CLAS 540A	Environment, Technology and Ancient Society: Sustaining Ancient Rome Ecology and Empire	4
CMN 540	Special Topics in Communication (Introduction to Civil Discourse)	4
CMN 657W	Media and the Environment	4
CMN 675	Civil Discourse Lab: Public Dialogue, Equity, & Authenticity	2
ECON 633	Microfinance	4
ECON 706	Economics of Climate Change	4
ENGL 736	Environmental Theory	4
ENGL 787	English Major Seminar	4
FIN 620	Topics in Finance I	4
FIN 720	Topics in Finance II (The Finance of CSR and ESG Investing)	4
GEOG 405	There Is No Planet B	4
GEOG 500	Making Change: Social and Environmental Justice in Practice	4
GEOG 581	Society, Environment and Justice	4
GEOG 673	From Political Ecology to Climate Justice	4
GEOG 701	Environmental Justice	4
HMP 501	Epidemiology and Community Medicine	4
HMGT 698	Topics (How to Change the World: Social Entrepreneurship and Social Franchising)	1
HMP 715	Environmental Health	4
IA 401	Foundations of International and Global Studies	4
MGT 630	Leading in Diverse Organizations	4
MGT 701	Stakeholder Engagement & Sustainable Businesses	4
MGT 755	Managing Business and People Across Borders	4
MKTG 620	Topics in Marketing (Sustainability and Marketing)	4
NAIS 400	Introduction to Native American and Indigenous Studies	4
NR 444	The New Pirates of the Caribbean	4
NR 572	Introduction to Natural Resource Economics	4
NR 602	Natural Resources and Environmental Policy	4
NR 643	Economics of Forestry	4
NR 662	Environmental Policy, Planning and Sustainability in New Zealand	3
NR 720	International Environmental Politics and Policies for the 21st Century	4
NR 724	Resolving Environmental Conflicts	4
NR 784	Sustainable Living - Global Perspectives	4
NR 787	Advanced Topics in Sustainable Energy	4
PHIL 431	Business Ethics	4
PAUL 670	BiP-Analytical Intelligence Topics (B-Impact Clinic, Carbon Clinic)	2
PHIL 450	Environmental Ethics	4
POLT 444	Politics and Policy in a Warming World	4
POLT 548	Drug Wars	4
POLT 549	The Politics of Markets	4
POLT 751	Comparative Environmental Politics and Policy	4
POLT 797C	Seminar in Comparative Politics (Conflict and Environmental Peacebuilding)	4
PSYC 760W	Ecopsychology	4
RMP 511	Issues of Wilderness and Nature in American Society	4
RMP 776	Human Dimensions of Natural Environments	4
SC 680	Global Supply Chain Management	4
SOC 444A	Honors/Society in the Arctic	4
SOC 450	Contemporary Social Problems	4
SOC 565	Environment and Society	4
SOC 665	Environmental Sociology	4
SOC 693	Global Change and Social Sustainability	4
SOC 730	Communities and the Environment	4
SUST 600	Sustainability Independent Study	1-4
SUST 605	Sustainability Internship	1-4
SW 440A	Honors/Healthy Communities: Environmental Justice and Social Change	4
WGS 505	Survey in Women's Studies	4
WGS 798W	Colloquium	4

Student Learning Outcomes

Program Learning Outcomes

Comprehend Grand Challenges

- Students gain knowledge of the fundamental aspects of complex sustainability challenges.

Think in Systems

- Students have an ability to analyze and synthesize the interconnections among environmental, social, and economic aspects of complex systems, as well as how problems manifest at different scales (local to global) and at different times (connections between past, present, and future).

Advocate for Values

- Students can identify, assess, respect, and navigate the diverse values, interests, and types of knowledge inherent in sustainability challenges, while simultaneously addressing power imbalances and promoting social justice.

Apply Knowledge to a Lifetime of Action

- Personal practice: Students understand how sustainability impacts their lives and can assess how their actions impact sustainability at personal, institutional, and societal levels.
- Professional practice: All students, regardless of major, understand how their professional work contributes to sustainable communities, can apply disciplinary and other forms of knowledge and skills to contribute to sustainable solutions.
- Collaborative practice: Students learn how to collaborate across disciplines and across sectors to jointly determine project goals, create knowledge, and develop innovative and effective solutions to sustainability challenges.

Wildlife and Conservation Biology

The Wildlife & Conservation Biology major provides students with the knowledge and tools to study, conserve, and manage wildlife and their habitats.

Our students combine science with their passion for nature and the outdoors. Our courses emphasize hands-on experience and place fundamental principles within an applied context. Students are encouraged to conduct research alongside faculty, and faculty actively assist students in obtaining internships.

Our students become research biologists and resource managers at state/federal agencies and non-profit organizations, conservation law officers, and environmental educators. Many go on to obtain an advanced degree.

https://colsa.unh.edu/natural-resources-environment

Programs

- Wildlife and Conservation Biology Major (B.S.) (p. 451)
- Wildlife and Conservation Biology Minor (p. 453)

Faculty

Wildlife and Conservation Biology Program Faculty

See Faculty Directory menu under the 'Explore Program Details' section.

Wildlife and Conservation Biology Major (B.S.)

https://www.unh.edu/program/bachelor-science/wildlife-conservation-biology

Description

The Wildlife & Conservation Biology major provides students with the knowledge and tools to study, conserve, and manage wildlife and their habitats.

Our students combine science with their passion for nature and the outdoors. Our courses emphasize hands-on experience and place fundamental principles within an applied context. Students are encouraged to conduct research alongside faculty, and faculty actively assist students in obtaining internships.

Our students become wildlife biologists and resource managers at state/federal agencies and non-profit organizations, conservation law officers, and environmental educators. Many go on to obtain an advanced degree.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

In addition to the Wildlife and Conservation Biology degree requirements (below), students must complete the University Discovery Program and the University Writing Requirements. Given the flexibility of this major, students may also complete a minor or dual major in a second area of interest, or apply for certification by The Wildlife Society.

Code	Title	Credits
Required Courses		
NR 433	Wildlife Ecology	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
NR 411	Environmental and Resource Economics Perspectives	4
NR 425	Field Dendrology	4
Math Foundations		
MATH 424B	Calculus for Life Sciences	4
or MATH 420	Finite Mathematics	
Chemistry Foundations		
CHEM 411	Introductory Chemistry for Life Sciences	4
or CHEM 403	General Chemistry I	
Introductory Ecology		
NR 527	Forest Ecology	4
or BIOL 541W	Ecology	
NR 415	Natural Resources Field Methods [1]	2
NR 417	Sophomore Seminar: Wildlife and Conservation Biology [1]	2
BIOL 528	Applied Biostatistics I	4
Animal Morphology, Evolution, and Ecology		
Select two courses from the following:		8
NR 506	Forest Entomology	
or ZOOL 555	Introduction to Entomology	
NR 712	Mammalogy	
or MEFB 535	Marine Mammal Biology	
ZOOL 518	Comparative Morphology and Biology of Vertebrates	
ZOOL 542	Ornithology	
or MEFB 510	Field Ornithology	
ZOOL 566	Herpetology	
ZOOL 710	Sharks and Bony Fishes	
or MEFB 741	Sharks: Biology and Conservation	
Communications Skills		
NR 508	Communicating Science	4
or ENGL 501	Introduction to Creative Nonfiction	
or ENGL 502	Professional and Technical Writing	
or ENGL 503	Persuasive Writing	
or CMN 500	Public Speaking	
Evolution/Genetics		
NR 664	Conservation Genetics and Applied Evolution	4
or ZOOL 690	Evolution	
or ZOOL 690W	Evolution	
Physiology/Behavior		
ZOOL 625	Principles of Animal Physiology	3-5
or ZOOL 613W	Animal Behavior	
or ZOOL 726	Conservation Behavior	
Policy		
NR 602	Natural Resources and Environmental Policy	3-4
or MARI 705	Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy	
or POLT 500	American Public Policy	
NR 615	Wildlife Habitats	4
NR 650	Principles of Conservation Biology	4

Geographic Information Systems		
NR 658	Introduction to Geographic Information Systems	4
or ESCI 777	GIS for Earth & Environmental Sciences	
NR 640	Wildlife Population Ecology	4
Advanced Ecology Elective		
NR 641	Wildlife Disease Ecology	4
or NR 642	Introduction to Biogeography	
or NR 713	Quantitative Ecology	
or NR 729	Silviculture	
or NR 730	Terrestrial Ecosystems	
or NR 734	Tropical Ecology	
or NR 751	Aquatic Ecosystems	
or NR 765	Community Ecology	
or BIOL 720	Plant-Animal Interactions	
or MEFB 717	Lake Ecology	
or ZOOL 708	Stream Ecology	
NR 740	Inventory and Monitoring of Ecological Communities	4
Capstone		
Select one of the following:		4
NR 750	Sustaining Biological Diversity [2]	
NR 745	Forest Management [2]	
Total Credits		**90-93**

[1] NR 415 Natural Resources Field Methods & NR 417 Sophomore Seminar: Wildlife and Conservation Biology are 2-credit courses. Students should meet with their advisor for guidance on course load (e.g., 14-15 *or* 18 cr.) that best accommodate these courses while meeting the 128-credit which requires 32 credits per year (on average).

[2] Capstone can also be met with NR 663 Applied Directed Research in New Zealand UNH EcoQuest (or similar, approved experience) if taken as a senior, in the final year. An Honors Thesis/UROP/URA/SURF/ Independent Study (or similar) **cannot** count as a Capstone for this major.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
NR 433	Wildlife Ecology	4
NR 425	Field Dendrology	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
ENGL 401	First-Year Writing	4
	Credits	**16**
Spring		
MATH 424B	Calculus for Life Sciences	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
NR 411	Environmental and Resource Economics Perspectives	4
Discovery Elective		4
	Credits	**16**
Second Year		
Fall		
NR 415	Natural Resources Field Methods	2
NR 527	Forest Ecology	4
CHEM 411	Introductory Chemistry for Life Sciences	4
ZOOL 613W	Animal Behavior	5
	Credits	**15**
Spring		
NR 417	Sophomore Seminar: Wildlife and Conservation Biology	2
NR 658	Introduction to Geographic Information Systems	4
BIOL 528	Applied Biostatistics I	4
Discovery Elective		4
Animal Morphology, Evolution and Ecology Elective		4
	Credits	**18**
Third Year		
Fall		
NR 615	Wildlife Habitats	4
ENGL 501	Introduction to Creative Nonfiction	4
ZOOL 690 or ZOOL 690W	Evolution or Evolution	4
Discovery Elective		4
	Credits	**16**
Spring		
NR 602	Natural Resources and Environmental Policy	4
NR 650	Principles of Conservation Biology	4
Discovery Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
NR 642	Introduction to Biogeography	4
NR 740	Inventory and Monitoring of Ecological Communities	4
Elective		4
Elective		4
	Credits	**16**
Spring		
NR 640	Wildlife Population Ecology	4
NR 750 or NR 745	Sustaining Biological Diversity or Forest Management	4
Elective		4
Animal Morphology, Evolution and Ecology Elective		4
	Credits	**16**
	Total Credits	**129**

Student Learning Outcomes

Program Learning Outcomes

Students will:

- Understand the ecological and societal value of biodiversity, sustainability, and environmental stewardship;

- learn/understand ecological concepts and fundamental principles and techniques to manage and conserve wildlife habitat and populations;
- know the taxonomy, ecology, and natural history of the majority of native flora and fauna in New England;
- locate, evaluate, and summarize information from both print and electronic media relevant to wildlife and conservation biology issues;
- effectively communicate scientific information in written and oral formats;
- master mathematical, statistical, and study design knowledge and skills, and use state-of-the-art software, hardware, and analytical techniques relevant to wildlife and conservation biology;
- be familiar with a variety of natural resource laws and regulations;
- understand how to integrate relevant social sciences and human dimensions approaches to address wildlife and conservation biology issues as part of multidisciplinary teams.

Wildlife and Conservation Biology Minor

https://colsa.unh.edu/natural-resources-environment/program/minor/wildlife-conservation-biology

Description

The minor in Wildlife and Conservation Biology serves as a concentrated study, beyond a student's primary major, that allows students to explore their interest in wildlife ecology and conservation and their passion for nature and the outdoors.

Requirements

Academic policies related to Minors.

- The minor consists of completing a minimum of five courses (20 credits).
- Up to 8 credits can be used to satisfy both major and minor requirements.
- A maximum of two EcoQuest courses may be used to satisfy minor requirements.
- Additional courses from other study-abroad programs may be used toward the minor with permission.

Code	Title	Credits
Required Courses		
Category 1		
Select one course from the following:		4
NR 433	Wildlife Ecology	
NR 650	Principles of Conservation Biology [1,2,6]	
Category 2		
Select at least one (up to 2) of the following courses:		4
NR 425	Field Dendrology	
NR 506	Forest Entomology	
or ZOOL 555	Introduction to Entomology	
NR 712	Mammalogy	
MEFB 628	Marine Invertebrate Evolution and Ecology	
ZOOL 542	Ornithology	
ZOOL 566	Herpetology	
ZOOL 710	Sharks and Bony Fishes	
Category 3		
Select at least two (up to 3) of the following courses (and note that many have pre-requisites):		12
NR 615	Wildlife Habitats [2,3]	
NR 640	Wildlife Population Ecology [2]	
NR 641	Wildlife Disease Ecology	
NR 642	Introduction to Biogeography [3]	
NR 650	Principles of Conservation Biology [1,2,6]	
NR 664	Conservation Genetics and Applied Evolution	
NR 713	Quantitative Ecology	
NR 734	Tropical Ecology	
NR 740	Inventory and Monitoring of Ecological Communities [2,4]	
NR 765	Community Ecology [3]	
NR 795	Investigations [5]	
ZOOL 613W	Animal Behavior	
or ZOOL 733W	Behavioral Ecology	
Total Credits		**20**

1. NR 661 is considered an appropriate equivalent for NR 650.
2. Enrollments are capped and admission is not guaranteed to those pursuing a minor.
3. NR 660 (at UNH-EcoQuest) can be used as a replacement for one, NR 615, NR 642, **or** NR 765.
4. NR 663 (at UNH-EcoQuest) is considered an appropriate equivalent for NR 740.
5. NR 795 requires working with an individual WCB faculty member on a special problem/issue.
6. NR 650 can only count towards *either* Category 1 *or* Category 3 (but not both).

Zoology (ZOOL)

Zoology is a field within the biological sciences that is dedicated to the study of animals: their classification, evolution, and development along with their habits, behaviors, and relationships. The zoology majors (B.S. and B.A.) build on the core biology curriculum by including courses in comparative morphology, physiology, and a wide selection of animal survey classes. In the Bachelor of Science degree program, you will take a series of foundational courses in biology, chemistry, physics, statistics, and ecology while having the flexibility to specialize within the major and/or the pursuance of a minor. The Bachelor of Arts degree in zoology is designed as a flexible program, allowing you to pursue an interdisciplinary or dual major for a career in fields such as education, conservation, and public relations.

The University's location and facilities provide unique opportunities for the study of aquatic and terrestrial animals due to its access to the seacoast and the lakes region of New Hampshire, White Mountain National Forest, and the presence of two coastal marine laboratories, as well as estuarine and freshwater facilities. There is a strong teaching and research emphasis on ecological and physiological processes in aquatic animals and ecosystems. Major strengths of the program are the hands-on approach to teaching and emphasis on involving undergraduates in research.

https://colsa.unh.edu/biological-sciences

Programs

- Zoology Major (B.A.) (p. 454)
- Zoology Major (B.S.) (p. 456)
- Zoology Minor (p. 459)

Faculty

Department of Biological Sciences Faculty

Zoology Major (B.A.)

https://www.unh.edu/program/bachelor-arts/zoology

Description

Built upon the common background of the biology core curriculum, the Bachelor of Arts (B.A.) in Zoology is designed for students to create an interdisciplinary or dual major, particularly if they want to pursue public relations, teaching, or other careers in combination with a liberal arts background. Students have more flexibility when choosing courses from the biology core and may enter this program as freshmen or transfer in from other liberal arts or science programs.

New England Regional Student Program

The bachelor's degree in zoology is one of the specialized curricula recognized by the New England Board of Higher Education and participates in the New England Regional Student Program. Please refer to the Tuition Break Online Database for a list of eligible New England States.

General Science Certification

See Department of Education

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Minimum grade of D# or better is required in CHEM 411, PHYS 401, and MATH 424B (if taken); minimum grade of C# or better is required in all other courses.

ZOOL 600, BIOL 695, ZOOL 795, or ZOOL 799H may substitute for one elective with academic advisor approval, if taken for a minimum of four credits. The four credits may be spread over multiple semesters if they are consecutive and with the same faculty mentor.

Students must fulfill a foreign language requirement in lieu of one advanced elective.

Code	Title	Credits
Core Curriculum Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BIOL 528	Applied Biostatistics I	4
or BIOL 428	Quantitative Biosciences	
or BIOL 633	Data Analysis for Life Science	
or BIOL 711	Experimental Design & Analysis	
or MATH 424B	Calculus for Life Sciences	
BIOL 541W	Ecology	4
BMCB 501	Biological Chemistry	4
ANSC 612	Genetics of Animals	4
or GEN 604	Principles of Genetics	
CHEM 411	Introductory Chemistry for Life Sciences	4
PHYS 401	Introduction to Physics I	4
ZOOL 400	Professional Perspectives in Zoology	1
ZOOL 518	Comparative Morphology and Biology of Vertebrates	4
ZOOL 625	Principles of Animal Physiology	3
ZOOL 690	Evolution	4
BIOL 780	Capstone Companion Course	1
Zoology Electives		
Animal Survey Courses		4-5
Select one course from the following:		
MEFB 628	Marine Invertebrate Evolution and Ecology	
MEFB 510	Field Ornithology	
NR 712	Mammalogy	
ZOOL 542	Ornithology	
ZOOL 555	Introduction to Entomology	
ZOOL 566	Herpetology	
ZOOL 710	Sharks and Bony Fishes	
Electives [1,2]		
Select two courses from the following: [1]		4-5
ANTH 660	Human Osteology	4
BIOL 695	Biology Teaching Practices	1-4
BIOL 700	Current and Controversial Issues in Biology (C)	4
BIOL 720	Plant-Animal Interactions (C)	4
BIOL 706	Data Science with R for the Life Sciences	4
BMS 503/504	General Microbiology	3
BMS 718	Mammalian Physiology	4
MEFB 503	Introduction to Marine Biology	4
MEFB 510	Field Ornithology	4
MEFB 628	Marine Invertebrate Evolution and Ecology	5
MEFB 675	Marine Mammal Biology and Conservation	3
MEFB 717	Lake Ecology	4
MEFB 755	Biological Oceanography (C)	3
MEFB 772	Fisheries Biology: Conservation and Management	4
MEFB 773	Physiology of Fishes	4
NR 640	Wildlife Population Ecology	4
NR 642	Introduction to Biogeography	4
NR 650	Principles of Conservation Biology	4
NR 712	Mammalogy	4
NSB 727	Animal Communication (C)	4
TECH 797	Undergraduate Ocean Research Project (C)	2
ZOOL 529	Developmental Biology	4
ZOOL 542	Ornithology	4
ZOOL 555	Introduction to Entomology	4
ZOOL 566	Herpetology	4
ZOOL 600	Field Experience	1-4
ZOOL 610	Principles of Aquaculture	4
ZOOL 613W	Animal Behavior	5
ZOOL 708	Stream Ecology (C)	4
ZOOL 710	Sharks and Bony Fishes	4
ZOOL 726	Conservation Behavior (C)	4
ZOOL 733W	Behavioral Ecology (C)	4
ZOOL 736	Genes and Behavior (C)	4
ZOOL 740	Acoustic Ecology (C)	4
ZOOL 777W	Neuroethology (C)	4
ZOOL 795	Independent Investigations in Zoology	1-4
ZOOL 799H	Honors Senior Thesis (C)	1-4
Shoals Courses:		
MEFB 505	Introduction to Applied Science Communication	4

MEFB 506	Marine Parasitology and Disease	4
MEFB 510	Field Ornithology	4
MEFB 530	Evolution and Marine Diversity	4
MEFB 535	Marine Mammal Biology	4
MEFB 674	Ecology and Marine Environment	4
MEFB 702	Sustainable Marine Fisheries	4
MEFB 714	Field Animal Behavior	4
MEFB 730	Underwater Research	4
MEFB 741	Sharks: Biology and Conservation	4
MEFB 751	Research in Biology at the Shoals Marine Lab	4
MEFB 754	Anatomy and Function of Marine Vertebrates	4
Study Abroad Courses:		
NR 660	Ecology and Biogeography of New Zealand	5
NR 661	Restoration Ecology and Ecosystem Management in New Zealand	4
NR 662	Environmental Policy, Planning and Sustainability in New Zealand	3
NR 663	Applied Directed Research in New Zealand (C)	4

[1] A single course cannot be used for both a core requirement and an elective (e.g., ZOOL 542 cannot be used to fulfill the animal survey requirement and as an elective).

[2] A 600, 695, 795, or 799 experience may substitute for one elective with academic advisor approval, but only if taken for at least four credits. These four credits may be spread over multiple semesters if they are consecutive and with the same faculty mentor

Capstone Experience

As part of the University of New Hampshire's Discovery Program requirements, all students must complete a capstone experience during their senior year (after earning at least 90 credits). **The capstone experience for students majoring in Biology consists of BOTH (1) an approved individual experience AND (2) the successful completion of the BIOL 780 Capstone Companion Course.** Students will not be approved for graduation until capstone certification has been granted.

1) The individual experience

The individual experience may be satisfied through various forms of experiential learning (e.g., Honors thesis, mentored research project, internship) or a course denoted with a "(C)" in the courses listed above. The individual experience must fulfill **at least one** of the University's capstone criteria:

- synthesizes and applies disciplinary knowledge and skills
- fosters reflection on undergraduate learning and experience
- demonstrates emerging professional competencies
- applies, analyzes, and/or interprets research, data, or artistic expression
- explores areas of interest based on the integration of the prior learning

Before beginning *any* capstone individual experience, students MUST SUBMIT A COMPLETED CAPSTONE APPROVAL FORM to their Program Coordinator.

Students can obtain this form on the Department's Capstone page or from their Program Coordinator. Here they will describe their proposed individual experience and how it fulfills at least one of the University's capstone criteria listed above. If the student is selecting a "C" course for their individual experience, they should obtain the course syllabus from the instructor for information about the course's content and learning objectives.

2) Enrollment in BIOL 780 Capstone Companion Course

Students will also be required to enroll in BIOL 780 (1 cr.) **during the semester of their individual experience.** BIOL 780 is offered every Fall and Spring semester.

- If the individual experience is a two-semester thesis, BIOL 780 should be taken during the second semester.
- If the individual experience occurs during the summer (e.g., internship), BIOL 780 should be taken during the Fall semester that immediately follows.
- Note: Because BIOL 780 is not offered during the summer, students cannot complete their individual experience during the summer *and graduate during that same September*. Summer experiences could only be used as individual capstone experiences if completed the summer before the student's senior year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
ZOOL 400	Professional Perspectives in Zoology	1
Language Course		4
Discovery Course		4
	Credits	**17**
Spring		
BIOL 411	Introductory Biology: Molecular and Cellular	4
Language Course		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
CHEM 411	Introductory Chemistry for Life Sciences	4
ZOOL 518	Comparative Morphology and Biology of Vertebrates	4
Animal Survery or Discovery Course		4
BIOL Elective or Discovery Course		4-5
	Credits	**16-17**
Spring		
BIOL 541W	Ecology	4
BIOL 528	Applied Biostatistics I	4
BMCB 501	Biological Chemistry	4

Animal Survey or Discovery Course		4
	Credits	**16**
Third Year		
Fall		
ANSC 612 or GEN 604	Genetics of Animals or Principles of Genetics	4
ZOOL 690	Evolution	4
PHYS 401	Introduction to Physics I	4
BIOL Elective		4-5
	Credits	**16-17**
Spring		
ZOOL 625	Principles of Animal Physiology	3
WI Discovery Course		4
BIOL Elective or Discovery Course		4
General Elective [1]		4
	Credits	**15**
Fourth Year		
Fall		
Major Capstone		4
BIOL 780	Capstone Companion Course	1
General Elective [1]		4
General Elective [1]		4
General Elective [1]		4
	Credits	**17**
Spring		
Animal Survery or Discovery Course		4
General Elective [1]		4
General Elective [1]		4
General Elective [1]		4
	Credits	**16**
	Total Credits	**129-131**

[1] Students can explore a second major, minor, study abroad and/or general electives.

Student Learning Outcomes

Program Learning Outcomes

Students demonstrate that they understand basic principles of Zoology.

- Understand the biodiversity and ecological roles of selected animal taxa.
- Demonstrate understanding of animal physiology and structure at the cellular and organismal levels.
- Describe and apply key principles and mechanisms of evolution and genetics.
- Comprehend the relationship between organisms and their environments.

Students demonstrate that they can undertake scientifically valid methods of inquiry.

- Demonstrate proficiency in searching, reading, and understanding scientific literature.

Students demonstrate that they can think critically and analytically.

- Analyze and present data using appropriate quantitative and graphical tools.

Students demonstrate that they can communicate effectively.

- Develop effective written and oral communication skills for conveying scientific information effectively to a wide audience.
- Students practice science responsibly and ethically, and acknowledge the influence of cultural and historical biases in the sciences.

Zoology Major (B.S.)

https://www.unh.edu/program/bachelor-science/zoology

Description

The Bachelor of Science (B.S.) in Zoology builds from the common background of the biology core curriculum to provide ample time for third- and fourth-year students to concentrate in specialized disciplines such as marine and freshwater biology, behavior, cell and developmental biology, ecology, evolution, fisheries, physiology, and neurobiology while giving students the foundation from which they can specialize in the area of zoology. Undergraduate students are encouraged to conduct field or lab-based research which helps determine advanced education disciplines for graduate studies. Many students ultimately work in the government, environmental agencies, education as well as agricultural, pharmaceutical, and biotechnology industries, where they conduct advanced research and/or teaching. Zoology majors had the second highest income and lowest unemployment rate according to data from the 2016 U.S. Census Bureau's American Community Survey.

New England Regional Student Program

The bachelor's degree in zoology is one of the specialized curricula recognized by the New England Board of Higher Education and participates in the New England Regional Student Program. Please refer to the Tuition Break Online Database for a list of eligible New England States.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Minimum grade of D# or better is required in CHEM 403, CHEM 404, CHEM 545, CHEM 546, PHYS 401, PHYS 402, and MATH 424B (if taken); minimum grade of C# or better is required in all other courses.

ZOOL 600, BIOL 695, ZOOL 795, or ZOOL 799H may substitute for one elective with academic advisor approval, if taken for a minimum of four

credits. The four credits may be spread over multiple semesters if they are consecutive and with the same faculty mentor.

Code	Title	Credits
Core Curriculum Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BIOL 528	Applied Biostatistics I	4
BIOL 541W	Ecology	4
BMCB 658A	General Biochemistry	3
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BIOL 633	Data Analysis for Life Science	4
or BIOL 428	Quantitative Biosciences	
or BIOL 711	Experimental Design & Analysis	
or MATH 424B	Calculus for Life Sciences	
ANSC 612	Genetics of Animals	4
or GEN 604	Principles of Genetics	
PHYS 401	Introduction to Physics I	4
PHYS 402	Introduction to Physics II	4
ZOOL 400	Professional Perspectives in Zoology	1
ZOOL 518	Comparative Morphology and Biology of Vertebrates	4
ZOOL 625 & ZOOL 626W	Principles of Animal Physiology and Animal Physiology Laboratory	5
ZOOL 690	Evolution	4
Capstone		
BIOL 780	Capstone Companion Course	1
Zoology Electives		
Animal Survey Courses		4-5
Select one course from the following:		
ZOOL 542	Ornithology	
ZOOL 555	Introduction to Entomology	
ZOOL 566	Herpetology	
MEFB 510	Field Ornithology	
MEFB 628	Marine Invertebrate Evolution and Ecology	
ZOOL 710	Sharks and Bony Fishes	
NR 712	Mammalogy	
Electives		
Select three courses from the following: [1]		
ANTH 660	Human Osteology	4
BIOL 695	Biology Teaching Practices	1-4
BIOL 700	Current and Controversial Issues in Biology (C)	4
BIOL 706	Data Science with R for the Life Sciences	4
BIOL 720	Plant-Animal Interactions (C)	4
BMS 718	Mammalian Physiology	4
BMS 503/504	General Microbiology	3
MEFB 503	Introduction to Marine Biology	4
MEFB 510	Field Ornithology	4
MEFB 628	Marine Invertebrate Evolution and Ecology	5
MEFB 675	Marine Mammal Biology and Conservation	3
MEFB 717	Lake Ecology	4
MEFB 755	Biological Oceanography (C)	3
MEFB 772	Fisheries Biology: Conservation and Management	4
MEFB 773	Physiology of Fishes	4
NR 640	Wildlife Population Ecology	4
NR 642	Introduction to Biogeography	4
NR 650	Principles of Conservation Biology	4
NR 712	Mammalogy	4
NSB 727	Animal Communication (C)	4
TECH 797	Undergraduate Ocean Research Project (C) [2]	2
ZOOL 529	Developmental Biology	4
ZOOL 542	Ornithology	4
ZOOL 555	Introduction to Entomology	4
ZOOL 613W	Animal Behavior	5
ZOOL 566	Herpetology	4
ZOOL 600	Field Experience [3]	1-4
ZOOL 610	Principles of Aquaculture	4
ZOOL 708	Stream Ecology (C)	4
ZOOL 710	Sharks and Bony Fishes	4
ZOOL 726	Conservation Behavior (C)	4
ZOOL 733W	Behavioral Ecology (C)	4
ZOOL 736	Genes and Behavior (C)	4
ZOOL 740	Acoustic Ecology (C)	4
ZOOL 777W	Neuroethology (C)	4
ZOOL 795	Independent Investigations in Zoology [3]	1-4
ZOOL 799H	Honors Senior Thesis (C)	1-4
Shoals Courses:		
MEFB 505	Introduction to Applied Science Communication	4
MEFB 506	Marine Parasitology and Disease	4
MEFB 510	Field Ornithology	4
MEFB 530	Evolution and Marine Diversity	4
MEFB 535	Marine Mammal Biology	4
MEFB 674	Ecology and Marine Environment	4
MEFB 702	Sustainable Marine Fisheries	4
MEFB 714	Field Animal Behavior	4
MEFB 730	Underwater Research	4
MEFB 741	Sharks: Biology and Conservation	4
MEFB 751	Research in Biology at the Shoals Marine Lab	4
MEFB 754	Anatomy and Function of Marine Vertebrates	4
Study Abroad Courses:		
NR 660	Ecology and Biogeography of New Zealand	5
NR 661	Restoration Ecology and Ecosystem Management in New Zealand	4
NR 662	Environmental Policy, Planning and Sustainability in New Zealand	3
NR 663	Applied Directed Research in New Zealand (C)	4

1 A single course cannot be used for both a core requirement and an elective (e.g., ZOOL 542 cannot be used to fulfill the animal survey requirement and as an elective).

2 This class requires enrollment in both fall and spring sections, 2 credits/semester for a total of 4 credits.

3 A 600, 695, 795, or 799 experience may substitute for one elective with academic advisor approval, but only if taken for at least four credits. These four credits may be spread over multiple semesters if they are consecutive and with the same faculty mentor.

Capstone Experience

As part of the University of New Hampshire's Discovery Program requirements, all students must complete a capstone experience during their senior year (after earning at least 90 credits). **The capstone experience for students majoring in ZOOLOGY BS consists of BOTH (1) an approved individual experience AND (2) the successful completion of the BIOL 780 Capstone Companion Course.** Students will not be approved for graduation until capstone certification has been granted.

1) The individual experience

The individual experience may be satisfied through various forms of experiential learning (e.g., Honors thesis, mentored research project, internship) or a course denoted with a "(C)" in the courses listed above. The individual experience must fulfill **at least one** of the University's capstone criteria:

- synthesizes and applies disciplinary knowledge and skills
- fosters reflection on undergraduate learning and experience
- demonstrates emerging professional competencies
- applies, analyzes, and/or interprets research, data, or artistic expression
- explores areas of interest based on the integration of the prior learning

Before beginning *any* capstone individual experience, students must submit a completed capstone approval form to their Program Coordinator.

Students can obtain this form on the Department's Capstone page or from their Program Coordinator. Here they will describe their proposed individual experience and how it fulfills at least one of the University's capstone criteria listed above. If the student is selecting a "C" course for their individual experience, they should obtain the course syllabus from the instructor for information about the course's content and learning objectives.

2) Enrollment in BIOL 780 Capstone Companion Course

Students will also be required to enroll in BIOL 780 Capstone Companion Course **during the semester of their individual experience.** BIOL 780 is offered every Fall and Spring semester.

- If the individual experience is a two-semester thesis, BIOL 780 should be taken during the second semester.
- If the individual experience occurs during the summer (e.g., internship), BIOL 780 should be taken during the Fall semester that immediately follows.
- Note: Because BIOL 780 is not offered during the summer, students cannot complete their individual experience during the summer *and graduate during that same September*. Summer experiences could only be used as individual capstone experiences if completed the summer before the student's senior year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 403	General Chemistry I	4
ZOOL 400	Professional Perspectives in Zoology	1
Discovery Course		4
	Credits	**17**
Spring		
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 404	General Chemistry II	4
MATH 424B	Calculus for Life Sciences [1]	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
ZOOL 518	Comparative Morphology and Biology of Vertebrates	4
Animal Survey or Discovery Course		4
BIOL Elective or Discovery Course		4-5
	Credits	**17-18**
Spring		
BIOL 541W	Ecology	4
BIOL 528	Applied Biostatistics I	4
BMCB 658A	General Biochemistry	3
Animal Survey or Discovery Course		4
	Credits	**15**
Third Year		
Fall		
ANSC 612 or GEN 604	Genetics of Animals or Principles of Genetics	4
ZOOL 690	Evolution	4
PHYS 401	Introduction to Physics I	4
BIOL Elective or Discovery Course		4-5
	Credits	**16-17**
Spring		
ZOOL 625 & ZOOL 626W	Principles of Animal Physiology and Animal Physiology Laboratory	5
PHYS 402	Introduction to Physics II	4
WI Discovery Course		4
BIOL Elective		4-5
	Credits	**17-18**
Fourth Year		
Fall		
Major Capstone		4
BIOL 780	Capstone Companion Course	1
BIOL 633 or BIOL 706	Data Analysis for Life Science [1] or Data Science with R for the Life Sciences	4
BIOL Elective or Discovery Course		4
General Elective [2]		4
	Credits	**17**
Spring		
Animal Survey or Discovery Course		4
General Elective [2]		4
General Elective [2]		4
General Elective [2]		4
	Credits	**16**
	Total Credits	**131-134**

[1] These courses are all options for the second quantitative course (in addition to BIOL 528 Applied Biostatistics I).

[2] Students can explore a second major, minor, study abroad and/or general electives.

Student Learning Outcomes

Program Learning Outcomes

Students demonstrate that they understand basic principles of Zoology.

- Understand the biodiversity and ecological roles of selected animal taxa.
- Demonstrate understanding of animal physiology and structure at the cellular and organismal levels.
- Describe and apply key principles and mechanisms of evolution and genetics.
- Comprehend the relationship between organisms and their environments.

Students demonstrate that they can undertake scientifically valid methods of inquiry.

- Demonstrate proficiency in searching, reading, and understanding scientific literature.

Students demonstrate that they can think critically and analytically.

- Analyze and present data using appropriate quantitative and graphical tools.

Students demonstrate that they can communicate effectively.

- Develop effective written and oral communication skills for conveying scientific information effectively to a wide audience.
- Students practice science responsibly and ethically, and acknowledge the influence of cultural and historical biases in the sciences.

Zoology Minor

https://www.unh.edu/program/minor/zoology

Description

The Zoology Minor is designed to provide a general introduction to animals and their ecology, while requiring in-depth knowledge of the diversity of at least one group (Animal Survey Course), a course dealing with animal structure, behavior, or physiology, and an additional animal-focused course of the student's choice.

Requirements

Academic policies related to Minors.

- The Zoology minor consists of completing five courses.

Code	Title	Credits
Required Courses		
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
Category I: Animal Survey		
Select one course from the following:		4-5
MEFB 628	Marine Invertebrate Evolution and Ecology	5
MEFB 510	Field Ornithology	4
NR 712	Mammalogy	4
ZOOL 542	Ornithology	4
ZOOL 555	Introduction to Entomology	4
ZOOL 566	Herpetology	4
ZOOL 710	Sharks and Bony Fishes	4
Category II: Animal Form, Function, Development & Behavior		
Select two courses from the following:		4-5
ZOOL 518	Comparative Morphology and Biology of Vertebrates	4
ZOOL 529	Developmental Biology	4
ZOOL 625	Principles of Animal Physiology	3
BMS 718	Mammalian Physiology	4
MEFB 773	Physiology of Fishes	4
NSB 727	Animal Communication	4
ZOOL 613W	Animal Behavior	5
ZOOL 690	Evolution	4
ZOOL 736	Genes and Behavior	4
Category III: Ecology		
Select one course from the following:		4-5
BIOL 541W	Ecology	4
MEFB 717	Lake Ecology	4
MEFB 741	Sharks: Biology and Conservation	4
MEFB 772	Fisheries Biology: Conservation and Management	4
NR 660	Ecology and Biogeography of New Zealand	5
NR 661	Restoration Ecology and Ecosystem Management in New Zealand	4
ZOOL 708	Stream Ecology	4
ZOOL 733W	Behavioral Ecology	4
ZOOL 740	Acoustic Ecology	4

College of Professional Studies (CPS)

The College of Professional Studies includes two distinct academic units.

University of New Hampshire Manchester (UNHM)
Dawn Albertson, Interim Dean
Sonic Woytonik, Interim Associate Dean of Academic Affairs
Stephanie Kirylych, Assistant Dean of Student Success

College of Professional Studies Online (CPSO)
Tamara Von George, Associate Provost for Online Learning
Nicole Horne, Senior Director of Advising & Student Engagement

The University of New Hampshire College of Professional Studies expands access to students seeking a world-class UNH education, both online and on campus. Bringing together career-driven programs, outstanding faculty talent, and top-ranked online learning solutions, we prepare students for success in their chosen field — and connect them to the wealth of opportunities in the region.

CPS Online (UNH-Granite State College) offers online undergraduate, post-baccalaureate, graduate, and certificate programs. UNH Manchester offers in-person and hybrid undergraduate, post-baccalaureate, and both in-person and online graduate and certificate programs. Both units offer traditional, continuing, and professional education.

Faculty
The College of Professional Studies faculty is its greatest asset. Faculty members—both online and in-person—have earned reputations for excellent teaching, scholarly achievement in their fields, and service to the community. They are recognized scholars and have acquired national and international reputations. Adjunct faculty members bring applied experience and a commitment to teaching to the classroom. Most importantly, the college's dedicated faculty members are outstanding teachers who care about each individual student.

https://cps.unh.edu/

Divisions

UNH Manchester (p. 633)

CPS Online (p. 460)

CPS Online

The UNH College of Professional Studies (CPS) Online (UNH-Granite State College) undergraduate programs are nationally ranked and cater to working adults who balance personal and professional responsibilities. CPS Online admission and transfer policies are designed to ensure that motivated individuals have access to a high quality college education. Our expert faculty are passionate about providing a transformative learning experience for every student.

Most CPS Online undergraduate students transfer credits from previous education, and those with prior knowledge, job training, or relevant experience may receive credit towards their degree. Students with an associate degree can benefit from Transfer Pathways, which waive most general education requirements for bachelor's degrees and provide opportunities for additional tuition savings. Supporting workforce development is a top priority for the University of New Hampshire and CPS Online demonstrates this commitment through cultivation of tuition partnerships across many industries.

Degrees

CPS Online offers associate and baccalaureate undergraduate degree programs.

Admissions Information

https://cps.unh.edu/online

Academic Centers

Business and Technology

Education (Educator Preparation Programs)

Health Care, Human Services, and Behavioral Sciences

Liberal Arts, Communication, and General Education (p. 592)

Learning Outcomes

Outcomes-Based Learning

Our greatest concern is that our graduates develop a specific set of skills and abilities.

The College's outcomes-based degree programs and curriculum:

- Provide standards to be met in demonstrating competence.
- Form a base from which to design and pursue learning activities.
- Foster the ability to demonstrate self-directed learning.

In addition to individual student assessment and grading, learning outcomes assessment is conducted in all programs to ensure the quality of our programs and to prompt ongoing improvements in teaching and learning.

CPS Online Learning Outcomes

At the College of Professional Studies-Online, at all levels and in all programs, we provide opportunities for students to learn to:

Communicate: To successfully receive and deliver messages through a variety of means (such as verbal, non-verbal, written, and visual) using the appropriate tools and practices for a given professional or community-based situation.

Think Critically and Comprehensively: To effectively collect, evaluate, and analyze information; define problems; make judgments; and draw conclusions that matter in real-world settings.

Apply Knowledge to Workplace and Community: To engage with diverse individuals, groups, or cultural frameworks; develop solutions to shared challenges; and reflect on professional practice and community engagement.

Gain Specialized Knowledge: To use essential frameworks, research methods, and professional practices of a field or discipline to further personal and professional growth.

Programs of Study

- Applied Psychology (p. 461)
- Behavioral Sciences (p. 483)
- Business (p. 492)
- Criminal Justice (p. 533)
- Education (p. 536)
- Health Care and Nursing (p. 568)
- Human Services (p. 577)
- Liberal Arts, Communication, and General Education (p. 592)
- Nonprofit and Public Sector Management (p. 616)
- Technology (p. 620)

Applied Psychology

- Addictions Studies (Minor) (p. 461)
- Applied Psychology (Minor) (p. 461)
- Applied Psychology Major: Addictions Studies Option (B.S.) (p. 462)
- Applied Psychology Major: Applied Behavior Analysis Option (B.S.) (p. 464)
- Applied Psychology Major: Counseling Foundations Option (B.S.) (p. 466)
- Applied Psychology Major: Court Advocacy Option (B.S.) (p. 468)
- Applied Psychology Major: Education Advocacy Option (B.S.) (p. 470)
- Applied Psychology Major: Emergency Management Strategy and Planning Option (B.S.) (p. 472)
- Applied Psychology Major: Family Studies Option (B.S.) (p. 474)
- Applied Psychology Major: Human Services Option (B.S.) (p. 476)
- Applied Psychology Major: Organizational Psychology Option (B.S.) (p. 478)
- Applied Psychology Major: Wellness and Prevention Option (B.S.) (p. 480)
- Counseling Foundations (Minor) (p. 482)
- Organizational Psychology (Minor) (p. 482)

Addictions Studies (Minor)

https://www.unh.edu/program/minor/addictions-studies

Description

This minor introduces students to the issues associated with supporting people involved with addictive behaviors. Students will study the foundational principles of providing counseling services to individuals with addiction issues as well as the disease model and characteristic needs of this population.

NOTE: This minor may not be declared with the following majors: BS Human Services: Addictions Studies or BS Applied Psychology: Addictions Studies.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Code	Title	Credits
Required Courses		
PSY 565	Core Principles of Addiction	4
PSY 654	Counseling Theories	4
PSY 675	Foundations of Addictions Counseling	4
PSY 710	The Biology of Addiction	4
SOCI 680	Issues of Addiction in Special Populations	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Identify the characteristics and behaviors of people with addictive behaviors, such as substance use disorder, gambling, video gaming, eating disorders, sex addiction, and other compulsive behaviors.
- Describe explanations for addictive behaviors.
- Apply knowledge of addictive behaviors to suggest treatment strategies.

Applied Psychology (Minor)

https://www.unh.edu/program/minor/applied-psychology

Description

The minor in applied psychology is designed to provide the student with the foundational education in psychology.

NOTE: This minor may not be declared with the following majors: BS Human Services: Applied Psychology or BS Applied Psychology (all options).

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Minor Requirements

Code	Title	Credits
PSY 410	Introduction to Psychology	4
IDIS 560	Research Methods in the Behavioral Sciences	4
MTH 504	Statistics	4
or PSY 530	Social Psychology	
PSY 740	Biopsychology	4
or PSY 725	Cognitive Psychology	
Select one of the following:		4
PSY 470	Child Development	
PSY 525	Human Development	
PSY 530	Social Psychology	
PSY 602	Theories of Personality	
PSY 685	Principles of Psychopathology	
SOSC 602	Men and Women in Cross-Cultural Perspectives	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Demonstrate a breadth of knowledge and application of psychological ideas to simple problems.
- Interpret behavior to draw conclusions about psychological phenomena.
- Demonstrate familiarity with the formal regulations that govern professional ethics in psychology and begin to embrace the values that will contribute to positive outcomes in work settings and in building a society responsive to multicultural and global concerns.
- Present information using a scientific approach and express ideas with clarity.

Applied Psychology Major: Addictions Studies Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-psychology-addictions-studies

Description

The Bachelor of Science degree in Applied Psychology provides an understanding of human behavior within a socio-cultural context. Students explore the variables affecting human behavior within both individual and group settings. The major positions students for either post-college employment or advanced education. The addictions studies option introduces students to the issues associated with supporting people involved with addictive behaviors.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Psychology		
Foundation Courses		
PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
or PSY 525	Human Development	
PSY 530	Social Psychology	4
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOCI 601	Society and the Individual	
MTH 504	Statistics	4
Intermediate Courses		
PSY 602	Theories of Personality	4
or PSY 685	Principles of Psychopathology	
IDIS 560	Research Methods in the Behavioral Sciences	4
Major Electives		
Select one of the following:		4

BEHS 675	Terrorism: Domestic and International	
or BEHS 695	Internship in Behavioral Science	
or CRIM 425	Juvenile Justice	
or MGMT 566	Organizational Behavior	
or PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 626	Educational Psychology	
or PSY 630	Psychology of Adulthood	
or PSY 646	Psychology of Occupational Stress	
or PSY 654	Counseling Theories	
or PSY 665	Principles of Assessment	
or PSY 685	Principles of Psychopathology	
or SLA 506	Language Acquisition	
or SOCI 675	Child Abuse and Neglect	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Advanced Courses		
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
Option in Addictions Studies		
PSY 565	Core Principles of Addiction	4
PSY 675	Foundations of Addictions Counseling	4
PSY 710	The Biology of Addiction	4
SOCI 680	Issues of Addiction in Special Populations	4
Integrative Capstone		
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
or PSY 797	Integrative Capstone: Project in Applied Psychology	
Total Credits		**56**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470 or PSY 525	Child Development or Human Development	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
PSY 530 or SOSC 602 or SOCI 601	Social Psychology or Men and Women in Cross-Cultural Perspectives or Society and the Individual	4
General Education Course		4
	Credits	**16**
Spring		
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 685	Theories of Personality or Principles of Psychopathology	4
Major Elective		4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
PSY 565	Core Principles of Addiction	4
PSY 675	Foundations of Addictions Counseling	4
Elective		4
	Credits	**16**
Spring		
PSY 710	The Biology of Addiction	4
PSY 725	Cognitive Psychology	4
SOCI 680	Issues of Addiction in Special Populations	4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
PSY 740	Biopsychology	4
Elective		4
Elective		4
	Credits	**16**
Spring		
PSY 797 or PSY 795	Integrative Capstone: Project in Applied Psychology or Integrative Capstone: Internship in Applied Psychology	4

Elective	4
Credits	**8**
Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze biological, developmental, cognitive, and sociocultural theories that provide an understanding of behavior and communicate this knowledge effectively.
- Use computer technology, as well as quantitative and scientific reasoning, to function as informed consumers of psychological research.
- Apply ethical principles that guide and inform the conduct of research and clinical practice.

Applied Psychology Major: Applied Behavior Analysis Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-psychology-applied-behavior-analysis

Description

The Bachelor of Science degree in Applied Psychology provides an understanding of human behavior within a socio-cultural context. Students explore the variables affecting human behavior within both individual and group settings. The major positions students for either post-college employment or advanced education. The applied behavior analysis option introduces students to procedures and research in applied behavior analysis (ABA). Courses in this option cover evidence-based practices and concepts in ABA and how they are applied in professional ABA practice.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Psychology		
Foundation Courses		
PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
or PSY 525	Human Development	
PSY 530	Social Psychology	4
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOCI 601	Society and the Individual	
MTH 504	Statistics	4
Intermediate Courses		
PSY 602	Theories of Personality	4
or PSY 685	Principles of Psychopathology	
IDIS 560	Research Methods in the Behavioral Sciences	4
Major Electives		
Select one of the following:		4

BEHS 695	Internship in Behavioral Science	
or BEHS 675	Terrorism: Domestic and International	
or CRIM 425	Juvenile Justice	
or MGMT 566	Organizational Behavior	
or PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 626	Educational Psychology	
or PSY 630	Psychology of Adulthood	
or PSY 646	Psychology of Occupational Stress	
or PSY 654	Counseling Theories	
or PSY 665	Principles of Assessment	
or PSY 685	Principles of Psychopathology	
or SLA 506	Language Acquisition	
or SOCI 675	Child Abuse and Neglect	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Advanced Courses		
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
Option in Applied Behavior Analysis		
PSY 550	Fundamentals of Applied Behavior Analysis	4
PSY 620	Behavioral Assessments and Interventions in Applied Behavior Analysis I	4
PSY 660	Ethics in Applied Behavior Analysis	4
PSY 720	Behavioral Assessments and Interventions in Applied Behavior Analysis II	4
Integrative Capstone		
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
or PSY 797	Integrative Capstone: Project in Applied Psychology	
Total Credits		**56**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470 or PSY 525	Child Development or Human Development	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
PSY 530 or SOSC 602 or SOCI 601	Social Psychology or Men and Women in Cross-Cultural Perspectives or Society and the Individual	4
MTH 504	Statistics	4
General Education Course		4
	Credits	**16**
Spring		
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 685	Theories of Personality or Principles of Psychopathology	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
PSY 550	Fundamentals of Applied Behavior Analysis	4
PSY 725	Cognitive Psychology	4
Elective		4
	Credits	**16**
Spring		
PSY 620	Behavioral Assessments and Interventions in Applied Behavior Analysis I	4
PSY 660	Ethics in Applied Behavior Analysis	4
Major Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
PSY 720	Behavioral Assessments and Interventions in Applied Behavior Analysis II	4
PSY 740	Biopsychology	4
Elective		4
	Credits	**16**
Spring		
PSY 797 or PSY 795	Integrative Capstone: Project in Applied Psychology or Integrative Capstone: Internship in Applied Psychology	4

Elective	4
Credits	**8**
Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze biological, developmental, cognitive, and sociocultural theories that provide an understanding of behavior and communicate this knowledge effectively.
- Use computer technology, as well as quantitative and scientific reasoning, to function as informed consumers of psychological research.
- Apply ethical principles that guide and inform the conduct of research and clinical practice.
- Develop strategies to implement behavioral methods and assessments with individuals to change behavior and increase socially significant behaviors.

Applied Psychology Major: Counseling Foundations Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-psychology-counseling-foundations

Description

The Bachelor of Science degree in Applied Psychology provides an understanding of human behavior within a socio-cultural context. Students explore the variables affecting human behavior within both individual and group settings. The major positions students for either post-college employment or advanced education. The counseling foundations option introduces students to the theory and process of delivering counseling services.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Psychology		
Foundation Courses		
PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
or PSY 525	Human Development	
PSY 530	Social Psychology	4
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOCI 601	Society and the Individual	
MTH 504	Statistics	4
Intermediate Courses		
PSY 602	Theories of Personality	4
IDIS 560	Research Methods in the Behavioral Sciences	4

Major Electives		
Select one of the following:		4
BEHS 675	Terrorism: Domestic and International	
or BEHS 695	Internship in Behavioral Science	
or CRIM 425	Juvenile Justice	
or MGMT 566	Organizational Behavior	
or PSY 530	Social Psychology	
or PSY 626	Educational Psychology	
or PSY 630	Psychology of Adulthood	
or PSY 646	Psychology of Occupational Stress	
or PSY 665	Principles of Assessment	
or SLA 506	Language Acquisition	
or SOCI 675	Child Abuse and Neglect	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Advanced Courses		
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
Option in Counseling Foundations		
PSY 603	Crisis Intervention	4
PSY 654	Counseling Theories	4
PSY 685	Principles of Psychopathology	4
PSY 665	Principles of Assessment	4
or COM 460	Interpersonal Communication and Group Dynamics	
Integrative Capstone		
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
or PSY 797	Integrative Capstone: Project in Applied Psychology	
Total Credits		**56**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470 or PSY 525	Child Development or Human Development	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
PSY 530 or SOSC 602 or SOCI 601	Social Psychology or Men and Women in Cross-Cultural Perspectives or Society and the Individual	4
General Education Course		4
	Credits	**16**
Spring		
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 685	Theories of Personality or Principles of Psychopathology	4
Major Elective		4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
PSY 603	Crisis Intervention	4
PSY 665 or COM 460	Principles of Assessment or Interpersonal Communication and Group Dynamics	4
Elective		4
	Credits	**16**
Spring		
PSY 654	Counseling Theories	4
PSY 685	Principles of Psychopathology	4
PSY 725	Cognitive Psychology	4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
PSY 740	Biopsychology	4
Elective		4
Elective		4
	Credits	**16**
Spring		
PSY 797 or PSY 795	Integrative Capstone: Project in Applied Psychology or Integrative Capstone: Internship in Applied Psychology	4

Elective	4
Credits	**8**
Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze biological, developmental, cognitive, and sociocultural theories that provide an understanding of behavior and communicate this knowledge effectively.
- Use computer technology, as well as quantitative and scientific reasoning, to function as informed consumers of psychological research.
- Apply ethical principles that guide and inform the conduct of research and clinical practice.

Applied Psychology Major: Court Advocacy Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-psychology-court-advocacy

Description

The Bachelor of Science degree in Applied Psychology provides an understanding of human behavior within a socio-cultural context. Students explore the variables affecting human behavior within both individual and group settings. The major positions students for either post-college employment or advanced education. The court advocacy option introduces students to the issues associated with supporting individuals as they navigate the criminal justice system.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Psychology		
Foundation Courses		
PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
or PSY 525	Human Development	
PSY 530	Social Psychology	4
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOCI 601	Society and the Individual	
MTH 504	Statistics	4
Intermediate Courses		
PSY 602	Theories of Personality	4
or PSY 685	Principles of Psychopathology	
IDIS 560	Research Methods in the Behavioral Sciences	4
Major Electives		
Select one of the following:		4

BEHS 675	Terrorism: Domestic and International	
or BEHS 695	Internship in Behavioral Science	
or CRIM 425	Juvenile Justice	
or MGMT 566	Organizational Behavior	
or PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 626	Educational Psychology	
or PSY 630	Psychology of Adulthood	
or PSY 646	Psychology of Occupational Stress	
or PSY 654	Counseling Theories	
or PSY 665	Principles of Assessment	
or PSY 685	Principles of Psychopathology	
or SLA 506	Language Acquisition	
or SOCI 675	Child Abuse and Neglect	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Advanced Courses		
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
Option in Court Advocacy		
CRIM 410	Introduction to Criminology	4
CRIM 555	The Criminal Justice System	4
CRIM 645	Crime Victim Rights and Remedies	4
CRIM 425	Juvenile Justice	4
or CRIM 707	Constitutional Law	
or SOCI 675	Child Abuse and Neglect	
Integrative Capstone		
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
or PSY 797	Integrative Capstone: Project in Applied Psychology	
Total Credits		**56**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
General Education Course		4
Open Elective		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470 or PSY 525	Child Development or Human Development	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
PSY 530 or SOSC 602 or SOCI 601	Social Psychology or Men and Women in Cross-Cultural Perspectives or Society and the Individual	4
General Education Course		4
	Credits	**16**
Spring		
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 685	Theories of Personality or Principles of Psychopathology	4
Major Elective		4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
CRIM 410	Introduction to Criminology	4
CRIM 555	The Criminal Justice System	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
Elective		4
	Credits	**16**
Spring		
CRIM 645	Crime Victim Rights and Remedies	4
CRIM 425 or CRIM 707 or SOCI 675	Juvenile Justice or Constitutional Law or Child Abuse and Neglect	4
PSY 725	Cognitive Psychology	4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
PSY 740	Biopsychology	4
Elective		4
Elective		4
	Credits	**16**

Spring		
PSY 797 or PSY 795	Integrative Capstone: Project in Applied Psychology or Integrative Capstone: Internship in Applied Psychology	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze biological, developmental, cognitive, and sociocultural theories that provide an understanding of behavior and communicate this knowledge effectively.
- Use computer technology, as well as quantitative and scientific reasoning, to function as informed consumers of psychological research.
- Apply ethical principles that guide and inform the conduct of research and clinical practice.

Applied Psychology Major: Education Advocacy Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-psychology-education-advocacy

Description

The Bachelor of Science degree in Applied Psychology provides an understanding of human behavior within a socio-cultural context. Students explore the variables affecting human behavior within both individual and group settings. The major positions students for either post-college employment or advanced education. The education advocacy option introduces students to the issues associated with supporting individuals who have specific instructional needs.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Psychology		
Foundation Courses		
PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
or PSY 525	Human Development	
PSY 530	Social Psychology	4
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOCI 601	Society and the Individual	
MTH 504	Statistics	4
Intermediate Courses		
PSY 602	Theories of Personality	4
or PSY 685	Principles of Psychopathology	

IDIS 560	Research Methods in the Behavioral Sciences	4
Major Electives		
Select one of the following:		4
BEHS 675	Terrorism: Domestic and International	
or BEHS 695	Internship in Behavioral Science	
or CRIM 425	Juvenile Justice	
or MGMT 566	Organizational Behavior	
or PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 626	Educational Psychology	
or PSY 630	Psychology of Adulthood	
or PSY 646	Psychology of Occupational Stress	
or PSY 654	Counseling Theories	
or PSY 665	Principles of Assessment	
or PSY 685	Principles of Psychopathology	
or SLA 506	Language Acquisition	
or SOCI 675	Child Abuse and Neglect	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Advanced Courses		
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
Option in Education Advocacy		
EDC 701	Special Education Law	4
EDC 713	Family and Community Relations in Early Childhood Education	4
SOSC 610	Multicultural Perspectives in Education	4
EDC 606	Young Children with Exceptionalities in Early Childhood Settings	4
or EDC 716	Students with Disabilities	
Integrative Capstone		
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
or PSY 797	Integrative Capstone: Project in Applied Psychology	
Total Credits		**56**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470 or PSY 525	Child Development or Human Development	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
PSY 530 or SOSC 602 or SOCI 601	Social Psychology or Men and Women in Cross-Cultural Perspectives or Society and the Individual	4
General Education Course		4
	Credits	**16**
Spring		
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 685	Theories of Personality or Principles of Psychopathology	4
Major Elective		4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
EDC 606 or EDC 716	Young Children with Exceptionalities in Early Childhood Settings or Students with Disabilities	4
SOSC 610	Multicultural Perspectives in Education	4
Elective		4
	Credits	**16**
Spring		
EDC 701	Special Education Law	4
EDC 713	Family and Community Relations in Early Childhood Education	4
PSY 725	Cognitive Psychology	4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
PSY 740	Biopsychology	4
Elective		4
Elective		4
	Credits	**16**

Spring		
PSY 797 or PSY 795	Integrative Capstone: Project in Applied Psychology or Integrative Capstone: Internship in Applied Psychology	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze biological, developmental, cognitive, and sociocultural theories that provide an understanding of behavior and communicate this knowledge effectively.
- Use computer technology, as well as quantitative and scientific reasoning, to function as informed consumers of psychological research.
- Apply ethical principles that guide and inform the conduct of research and clinical practice.

Applied Psychology Major: Emergency Management Strategy and Planning Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-psychology-emergency-management-strategy-planning

Description

The Bachelor of Science degree in Applied Psychology provides an understanding of human behavior within a socio-cultural context. Students explore the variables affecting human behavior within both individual and group settings. The major positions students for either post-college employment or advanced education. The emergency management strategy and planning option prepares students to address the psychological factors, prescriptive and descriptive models of decision making, cognitive biases, heuristics, risk perception, social influences, and past experiences that together help explain why people tend to be under prepared for potential natural and human-made disasters.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Psychology		
Foundation Courses		
PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
or PSY 525	Human Development	

PSY 530	Social Psychology	4
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOCI 601	Society and the Individual	
MTH 504	Statistics	4
Intermediate Courses		
PSY 602	Theories of Personality	4
or PSY 685	Principles of Psychopathology	
IDIS 560	Research Methods in the Behavioral Sciences	4
Major Electives		
Select one of the following:		4
BEHS 695	Internship in Behavioral Science	
or CRIM 425	Juvenile Justice	
or MGMT 566	Organizational Behavior	
or PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 626	Educational Psychology	
or PSY 630	Psychology of Adulthood	
or PSY 646	Psychology of Occupational Stress	
or PSY 654	Counseling Theories	
or PSY 665	Principles of Assessment	
or PSY 685	Principles of Psychopathology	
or SLA 506	Language Acquisition	
or SOCI 675	Child Abuse and Neglect	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Advanced Courses		
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
Option in Emergency Management Strategy and Planning		
BEHS 445	Homeland Security and Emergency Management	4
BEHS 610	Community Emergency Response	4
BEHS 665	Disaster Management	4
BEHS 675	Terrorism: Domestic and International	4
Integrative Capstone		
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
or PSY 797	Integrative Capstone: Project in Applied Psychology	
Total Credits		**56**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470 or PSY 525	Child Development or Human Development	4
	Credits	**16**
Second Year		
Fall		
BEHS 445	Homeland Security and Emergency Management	4
COM 480	Visual Communication	4
MTH 504	Statistics	4
General Education Course		4
	Credits	**16**
Spring		
BEHS 610	Community Emergency Response	4
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 685	Theories of Personality or Principles of Psychopathology	4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
PSY 530 or SOSC 602 or SOCI 601	Social Psychology or Men and Women in Cross-Cultural Perspectives or Society and the Individual	4
PSY 725	Cognitive Psychology	4
Elective		4
	Credits	**16**
Spring		
BEHS 665	Disaster Management	4
BEHS 675	Terrorism: Domestic and International	4
Major Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
PSY 740	Biopsychology	4
Elective		4

Elective		4
	Credits	**16**
Spring		
PSY 797 or PSY 795	Integrative Capstone: Project in Applied Psychology or Integrative Capstone: Internship in Applied Psychology	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze biological, developmental, cognitive, and sociocultural theories that provide an understanding of behavior and communicate this knowledge effectively.
- Use computer technology, as well as quantitative and scientific reasoning, to function as informed consumers of psychological research.
- Apply ethical principles that guide and inform the conduct of research and clinical practice.
- Assess the prescriptive and descriptive models of decision making, preparation for or mitigation of several natural and human-made disasters, and accepted best practices for preparing communities and individuals for hazards.

Applied Psychology Major: Family Studies Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-psychology-family-studies

Description

The Bachelor of Science degree in Applied Psychology provides an understanding of human behavior within a socio-cultural context. Students explore the variables affecting human behavior within both individual and group settings. The major positions students for either post-college employment or advanced education. The family studies option introduces students to the issues associated with providing human services to individuals as well as family groups.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Psychology		
Foundation Courses		

PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
or PSY 525	Human Development	
PSY 530	Social Psychology	4
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOCI 601	Society and the Individual	
MTH 504	Statistics	4
Intermediate Courses		
PSY 602	Theories of Personality	4
or PSY 685	Principles of Psychopathology	
IDIS 560	Research Methods in the Behavioral Sciences	4
Major Electives		
Select one of the following:		4
BEHS 675	Terrorism: Domestic and International	
or BEHS 695	Internship in Behavioral Science	
or CRIM 425	Juvenile Justice	
or MGMT 566	Organizational Behavior	
or PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 626	Educational Psychology	
or PSY 630	Psychology of Adulthood	
or PSY 646	Psychology of Occupational Stress	
or PSY 654	Counseling Theories	
or PSY 665	Principles of Assessment	
or PSY 685	Principles of Psychopathology	
or SLA 506	Language Acquisition	
or SOCI 675	Child Abuse and Neglect	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Advanced Courses		
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
Option in Family Studies		
PSY 480	Infant and Toddler Development	4
or PSY 470	Child Development	
PSY 630	Psychology of Adulthood	4
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
PSY 646	Psychology of Occupational Stress	4
or SOCI 675	Child Abuse and Neglect	
SOSC 675	Dynamics of Family Relationships	4
or SOSC 680	Stress and the Family	
Integrative Capstone		
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
or PSY 797	Integrative Capstone: Project in Applied Psychology	
Total Credits		**56**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470 or PSY 525	Child Development or Human Development	4
	Credits	**16**

Second Year

Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
PSY 530 or SOSC 602 or SOCI 601	Social Psychology or Men and Women in Cross-Cultural Perspectives or Society and the Individual	4
General Education Course		4
	Credits	**16**
Spring		
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 685	Theories of Personality or Principles of Psychopathology	4
Major Elective		4
General Education Course		4
	Credits	**16**

Third Year

Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
PSY 630 or SOSC 630	Psychology of Adulthood or Aspects of Aging and Older Adulthood in a Modern Society	4
PSY 646 or SOCI 675	Psychology of Occupational Stress or Child Abuse and Neglect	4
Elective		4
	Credits	**16**
Spring		
PSY 725	Cognitive Psychology	4
PSY 480 or PSY 470	Infant and Toddler Development or Child Development	4
SOSC 675 or SOSC 680	Dynamics of Family Relationships or Stress and the Family	4

Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
PSY 740	Biopsychology	4
Elective		4
Elective		4
	Credits	**16**
Spring		
PSY 797 or PSY 795	Integrative Capstone: Project in Applied Psychology or Integrative Capstone: Internship in Applied Psychology	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze biological, developmental, cognitive, and sociocultural theories that provide an understanding of behavior and communicate this knowledge effectively.
- Use computer technology, as well as quantitative and scientific reasoning, to function as informed consumers of psychological research.
- Apply ethical principles that guide and inform the conduct of research and clinical practice.

Applied Psychology Major: Human Services Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-psychology-human-services

Description

The Bachelor of Science degree in Applied Psychology provides an understanding of human behavior within a socio-cultural context. Students explore the variables affecting human behavior within both individual and group settings. The major positions students for either post-college employment or advanced education. The human services option introduces students to issues associated with providing appropriate services to people with diverse needs.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with

their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Psychology		
Foundation Courses		
PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
or PSY 525	Human Development	
PSY 530	Social Psychology	4
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOCI 601	Society and the Individual	
MTH 504	Statistics	4
Intermediate Courses		
PSY 602	Theories of Personality	4
or PSY 685	Principles of Psychopathology	
IDIS 560	Research Methods in the Behavioral Sciences	4
Major Electives		
Select one of the following:		4
BEHS 675	Terrorism: Domestic and International	
or BEHS 695	Internship in Behavioral Science	
or CRIM 425	Juvenile Justice	
or MGMT 566	Organizational Behavior	
or PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 626	Educational Psychology	
or PSY 630	Psychology of Adulthood	
or PSY 646	Psychology of Occupational Stress	
or PSY 654	Counseling Theories	
or PSY 665	Principles of Assessment	
or PSY 685	Principles of Psychopathology	
or SLA 506	Language Acquisition	
or SOCI 675	Child Abuse and Neglect	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Advanced Courses		
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
Option in Human Services		
HMSV 424	Human Services and the Helping Process	4
HMSV 480	Case Management	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
Select one of the following:		4
COM 460	Interpersonal Communication and Group Dynamics	
HRM 635	Managing Conflict	
PSY 654	Counseling Theories	
Integrative Capstone		
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
or PSY 797	Integrative Capstone: Project in Applied Psychology	
Total Credits		**56**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
General Education Course		4
Elective		4
	Credits	**16**

Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470 or PSY 525	Child Development or Human Development	4
	Credits	**16**

Second Year

Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
PSY 530 or SOSC 602 or SOCI 601	Social Psychology or Men and Women in Cross-Cultural Perspectives or Society and the Individual	4
General Education Course		4
	Credits	**16**

Spring		
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 685	Theories of Personality or Principles of Psychopathology	4
Major Elective		4
General Education Course		4
	Credits	**16**

Third Year

Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HMSV 424	Human Services and the Helping Process	4
HRM 635 or COM 460 or PSY 654	Managing Conflict or Interpersonal Communication and Group Dynamics or Counseling Theories	4
Elective		4
	Credits	**16**

Spring		
HMSV 480	Case Management	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
PSY 725	Cognitive Psychology	4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
PSY 740	Biopsychology	4
Elective		4
Elective		4
	Credits	**16**
Spring		
PSY 797 or PSY 795	Integrative Capstone: Project in Applied Psychology or Integrative Capstone: Internship in Applied Psychology	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze biological, developmental, cognitive, and sociocultural theories that provide an understanding of behavior and communicate this knowledge effectively.
- Use computer technology, as well as quantitative and scientific reasoning, to function as informed consumers of psychological research.
- Apply ethical principles that guide and inform the conduct of research and clinical practice.

Applied Psychology Major: Organizational Psychology Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-psychology-organizational-psychology

Description

The Bachelor of Science degree in Applied Psychology provides an understanding of human behavior within a socio-cultural context. Students explore the variables affecting human behavior within both individual and group settings. The major positions students for either post-college employment or advanced education. The organizational psychology option introduces students to the study of individual and group behavior in organizations and work environments.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		

One Writing Intensive course at the 600-level or above	
One Additional Writing Intensive Course	

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Psychology		
Foundation Courses		
PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
or PSY 525	Human Development	
PSY 530	Social Psychology	4
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOCI 601	Society and the Individual	
MTH 504	Statistics	4
Intermediate Courses		
PSY 602	Theories of Personality	4
or PSY 685	Principles of Psychopathology	
IDIS 560	Research Methods in the Behavioral Sciences	4
Major Electives		
Select one of the following:		4
BEHS 675	Terrorism: Domestic and International	
or BEHS 695	Internship in Behavioral Science	
or CRIM 425	Juvenile Justice	
or PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 626	Educational Psychology	
or PSY 630	Psychology of Adulthood	
or PSY 654	Counseling Theories	
or PSY 665	Principles of Assessment	
or PSY 685	Principles of Psychopathology	
or SLA 506	Language Acquisition	
or SOCI 675	Child Abuse and Neglect	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Advanced Courses		
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
Option in Organizational Psychology		
MGMT 566	Organizational Behavior	4
PSY 646	Psychology of Occupational Stress	4
COM 675	Organizational Communication	4
Select one of the following:		4
HRM 580	Change Management	
HRM 635	Managing Conflict	
HRM 740	Workplace Coaching	
SOCI 603	Work and Society	
Integrative Capstone		
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
or PSY 797	Integrative Capstone: Project in Applied Psychology	
Total Credits		**56**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470 or PSY 525	Child Development or Human Development	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
PSY 530 or SOSC 602 or SOCI 601	Social Psychology or Men and Women in Cross-Cultural Perspectives or Society and the Individual	4
General Education Course		4
	Credits	**16**
Spring		
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 685	Theories of Personality or Principles of Psychopathology	4
Major Elective		4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
COM 675	Organizational Communication	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
MGMT 566	Organizational Behavior	4

Elective		4
	Credits	**16**
Spring		
PSY 646	Psychology of Occupational Stress	4
PSY 725	Cognitive Psychology	4
HRM 580 or HRM 635 or HRM 740 or SOCI 603	Change Management or Managing Conflict or Workplace Coaching or Work and Society	4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
PSY 740	Biopsychology	4
Elective		4
Elective		4
	Credits	**16**
Spring		
PSY 797 or PSY 795	Integrative Capstone: Project in Applied Psychology or Integrative Capstone: Internship in Applied Psychology	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze biological, developmental, cognitive, and sociocultural theories that provide an understanding of behavior and communicate this knowledge effectively.
- Use computer technology, as well as quantitative and scientific reasoning, to function as informed consumers of psychological research.
- Apply ethical principles that guide and inform the conduct of research and clinical practice.

Applied Psychology Major: Wellness and Prevention Option (B.S.)

https://www.unh.edu/program/associate-science/behavioral-science-wellness-prevention

Description

The Bachelor of Science degree in Applied Psychology provides an understanding of human behavior within a socio-cultural context. Students explore the variables affecting human behavior within both individual and group settings. The major positions students for either post-college employment or advanced education. The wellness and prevention option introduces students to the key factors that impact the mental and physical well-being of individuals as well as strategies for prevention and health promotion.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Psychology		
Foundation Courses		
PSY 410	Introduction to Psychology	4
PSY 470	Child Development	4
or PSY 525	Human Development	
PSY 530	Social Psychology	4
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOCI 601	Society and the Individual	
MTH 504	Statistics	4
Intermediate Courses		
PSY 602	Theories of Personality	4
or PSY 685	Principles of Psychopathology	
IDIS 560	Research Methods in the Behavioral Sciences	4
Major Electives		
Select one of the following:		4
BEHS 675	Terrorism: Domestic and International	
or BEHS 695	Internship in Behavioral Science	
or CRIM 425	Juvenile Justice	
or MGMT 566	Organizational Behavior	
or PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 626	Educational Psychology	
or PSY 630	Psychology of Adulthood	
or PSY 646	Psychology of Occupational Stress	
or PSY 654	Counseling Theories	
or PSY 665	Principles of Assessment	
or PSY 685	Principles of Psychopathology	
or SLA 506	Language Acquisition	
or SOCI 675	Child Abuse and Neglect	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Advanced Courses		
PSY 725	Cognitive Psychology	4
PSY 740	Biopsychology	4
Option in Wellness and Prevention		
HLTC 560	Health Behaviors: Theoretical Foundations for Health Education	4
HLTC 720	Health Program Planning and Evaluation	4
SCI 502	Nutrition and Health	4
Select one of the following:		4
SCI 550	Wellness and the Human Body	
or SCI 575	Introduction to Lifestyle Medicine	
or SCI 604	Principles of Exercise Science	
or SCI 615	Fitness and Health	
Integrative Capstone		
PSY 795	Integrative Capstone: Internship in Applied Psychology	4
or PSY 797	Integrative Capstone: Project in Applied Psychology	
Total Credits		**56**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470 or PSY 525	Child Development or Human Development	4
	Credits	**16**

Second Year

Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
PSY 530 or SOSC 602 or SOCI 601	Social Psychology or Men and Women in Cross-Cultural Perspectives or Society and the Individual	4
General Education Course		4
	Credits	**16**
Spring		
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 685	Theories of Personality or Principles of Psychopathology	4
Major Elective		4
General Education Course		4
	Credits	**16**

Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 560	Health Behaviors: Theoretical Foundations for Health Education	4
SCI 502	Nutrition and Health	4
Elective		4
	Credits	**16**
Spring		
HLTC 720	Health Program Planning and Evaluation	4
SCI 550 or SCI 575 or SCI 604 or SCI 615	Wellness and the Human Body or Introduction to Lifestyle Medicine or Principles of Exercise Science or Fitness and Health	4
PSY 725	Cognitive Psychology	4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
PSY 740	Biopsychology	4
Elective		4
Elective		4
	Credits	**16**
Spring		
PSY 797 or PSY 795	Integrative Capstone: Project in Applied Psychology or Integrative Capstone: Internship in Applied Psychology	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze biological, developmental, cognitive, and sociocultural theories that provide an understanding of behavior and communicate this knowledge effectively.
- Use computer technology, as well as quantitative and scientific reasoning, to function as informed consumers of psychological research.
- Apply ethical principles that guide and inform the conduct of research and clinical practice.

Counseling Foundations (Minor)

https://www.unh.edu/program/minor/counseling-foundations

Description

This minor enables students to focus on issues and methods associated with providing counseling to individuals in distress. Students will study the personal and situational factors that can cause individuals to seek counseling. Students will also gain knowledge of the methods associated with communicating with individuals in distress to help them to solve problems.

NOTE: This minor may not be declared with the following majors: BS Human Services: Counseling Foundations or BS Applied Psychology: Counseling Foundations.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
PSY 602	Theories of Personality	4
PSY 603	Crisis Intervention	4
PSY 654	Counseling Theories	4
PSY 665	Principles of Assessment	4
or COM 460	Interpersonal Communication and Group Dynamics	
PSY 685	Principles of Psychopathology	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Identify personal and situational factors that lead individuals to seek counseling.
- Differentiate between different counseling theories and practices.

Organizational Psychology (Minor)

https://www.unh.edu/program/minor/organizational-psychology

Description

This minor explores the crossover of psychology and business by studying the principles of individual, group, and organizational behavior and applying this knowledge to the solution of problems at work. Principles include organizational culture, stress and conflict in the workplace, and maintaining psychological health within the context of work and organizations.

NOTE: This minor may not be declared with the following majors: BS Applied Psychology: Organizational Psychology, BS Business Management: Organizational Psychology, or BS Human Resource Management.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Minor Requirements

Code	Title	Credits
MGMT 566	Organizational Behavior	4
HRM 580	Change Management	4
PSY 646	Psychology of Occupational Stress	4
SOCI 603	Work and Society	4
Select one of the following:		4
HRM 635	Managing Conflict	
HRM 740	Workplace Coaching	
COM 675	Organizational Communication	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Discuss the role of groups in organizations and how they can influence organizational decision-making, efficiency, and effectiveness.
- Articulate the nature of interpersonal dynamics within organizational systems that facilitate or impede functionality and affect the change process in organizations.
- Describe the elements of occupational health and the effects of job stress and how to reduce it.

Behavioral Sciences

- Behavioral Science Major: Addictions Studies Option (A.S.) (p. 483)
- Behavioral Science Major: Applied Psychology Option (A.S.) (p. 484)
- Behavioral Science Major: Counseling Foundations Option (A.S.) (p. 485)
- Behavioral Science Major: Criminal Justice Option (A.S.) (p. 486)
- Behavioral Science Major: Emergency Management Strategy and Planning Option (A.S.) (p. 488)
- Behavioral Science Major: Human Services Option (A.S.) (p. 489)
- Behavioral Science Major: Wellness and Prevention Option (A.S.) (p. 490)
- Emergency Management Strategy and Planning Minor (p. 491)

Behavioral Science Major: Addictions Studies Option (A.S.)

https://www.unh.edu/program/associate-science/behavioral-science-addictions-studies

Description

The Associate in Science in Behavioral Science provides an interdisciplinary approach to understanding human behavior within a global world view. Foundation courses at an associate level introduce behavioral science students to the biological, psychological, social, and cultural variables of human behavior. This degree prepares students for a smooth transition to the B.S. in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice. The addictions studies option introduces students to the issues associated with supporting people involved with addictive behaviors.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Behavioral Science		
PSY 410	Introduction to Psychology	4
PSY 525	Human Development	4
SOCI 410	Introduction to Sociology	4
Option in Addiction Studies		
PSY 565	Core Principles of Addiction	4
PSY 675	Foundations of Addictions Counseling	4
SOCI 680	Issues of Addiction in Special Populations	4
Total Credits		**24**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the

student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
SOCI 410	Introduction to Sociology	4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
PSY 565	Core Principles of Addiction	4
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
PSY 525	Human Development	4
PSY 675	Foundations of Addictions Counseling	4
General Education Course		4
	Credits	**16**
Spring		
SOCI 680	Issues of Addiction in Special Populations	4
General Education Course		4
Elective		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in behavioral sciences.
- Evaluate ethical principles of the behavioral sciences.
- Prepare for seamless transition to the Bachelor of Science in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice.

Behavioral Science Major: Applied Psychology Option (A.S.)

https://www.unh.edu/program/associate-science/behavioral-science-applied-psychology

Description

The Associate in Science in Behavioral Science provides an interdisciplinary approach to understanding human behavior within a global world view. Foundation courses at an associate level introduce behavioral science students to the biological, psychological, social, and cultural variables of human behavior. This degree prepares students for a smooth transition to the B.S. in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice. The applied psychology option introduces students to the research basis of psychology.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major/Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Behavioral Science		
PSY 410	Introduction to Psychology	4
PSY 525	Human Development	4
SOCI 410	Introduction to Sociology	4
Option in Applied Psychology		

Select three of the following:		12
MTH 504	Statistics	
PSY 530	Social Psychology	
PSY 602	Theories of Personality	
PSY 630	Psychology of Adulthood	
PSY 685	Principles of Psychopathology	
SOSC 445	Race & Diversity in the U.S.	
SOSC 602	Men and Women in Cross-Cultural Perspectives	
Total Credits		**24**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
SOCI 410	Introduction to Sociology	4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 525	Human Development	4
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504 or PSY 530 or PSY 602 or PSY 630 or PSY 685 or SOSC 445 or SOSC 602	Statistics or Social Psychology or Theories of Personality or Psychology of Adulthood or Principles of Psychopathology or Race & Diversity in the U.S. or Men and Women in Cross-Cultural Perspectives	4
PSY 530 or MTH 504 or PSY 602 or PSY 630 or PSY 685 or SOSC 445 or SOSC 602	Social Psychology or Statistics or Theories of Personality or Psychology of Adulthood or Principles of Psychopathology or Race & Diversity in the U.S. or Men and Women in Cross-Cultural Perspectives	4
General Education Course		4
	Credits	**16**
Spring		
PSY 602 or MTH 504 or PSY 530 or PSY 630 or PSY 685 or SOSC 445 or SOSC 602	Theories of Personality or Statistics or Social Psychology or Psychology of Adulthood or Principles of Psychopathology or Race & Diversity in the U.S. or Men and Women in Cross-Cultural Perspectives	4
General Education Course		4
Elective		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in behavioral sciences.
- Evaluate ethical principles of the behavioral sciences.
- Prepare for seamless transition to the Bachelor of Science in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice.

Behavioral Science Major: Counseling Foundations Option (A.S.)

https://www.unh.edu/program/associate-science/behavioral-science-counseling-foundations

Description

The Associate in Science in Behavioral Science provides an interdisciplinary approach to understanding human behavior within a global world view. Foundation courses at an associate level introduce behavioral science students to the biological, psychological, social, and cultural variables of human behavior. This degree prepares students for a smooth transition to the B.S. in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice. The counseling foundations option introduces students to the theory and process of delivering counseling services.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Behavioral Science		
PSY 410	Introduction to Psychology	4
PSY 525	Human Development	4
SOCI 410	Introduction to Sociology	4
Option in Counseling Foundations		
COM 460	Interpersonal Communication and Group Dynamics	4
PSY 603	Crisis Intervention	4
PSY 654	Counseling Theories	4
Total Credits		**24**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
SOCI 410	Introduction to Sociology	4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
PSY 525	Human Development	4
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
PSY 603	Crisis Intervention	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
PSY 654	Counseling Theories	4
General Education Course		4
Elective		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in behavioral sciences.
- Evaluate ethical principles of the behavioral sciences.
- Prepare for seamless transition to the Bachelor of Science in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice.

Behavioral Science Major: Criminal Justice Option (A.S.)

https://www.unh.edu/program/associate-science/behavioral-science-criminal-justice

Description

The Associate in Science in Behavioral Science provides an interdisciplinary approach to understanding human behavior within a global world view. Foundation courses at an associate level introduce behavioral science students to the biological, psychological, social, and cultural variables of human behavior. This degree prepares students for a smooth transition to the B.S. in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice. The criminal justice option introduces students to the justice system as well as the rights and behaviors of people in the system.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of a C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Behavioral Science		
PSY 410	Introduction to Psychology	4
PSY 525	Human Development	4
SOCI 410	Introduction to Sociology	4
Option in Criminal Justice		
CRIM 410	Introduction to Criminology	4
CRIM 555	The Criminal Justice System	4
CRIM 425	Juvenile Justice	4
or CRIM 600	Crime Prevention and Control	
Total Credits		**24**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
SOCI 410	Introduction to Sociology	4
	Credits	**16**
Spring		
CRIM 410	Introduction to Criminology	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
CRIM 555	The Criminal Justice System	4
PSY 525	Human Development	4
General Education Course		4
	Credits	**16**
Spring		
CRIM 425 or CRIM 600	Juvenile Justice or Crime Prevention and Control	4
General Education Course		4
Elective		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in behavioral sciences.

- Evaluate ethical principles of the behavioral sciences.
- Prepare for seamless transition to the Bachelor of Science in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice.

Behavioral Science Major: Emergency Management Strategy and Planning Option (A.S.)

https://www.unh.edu/program/associate-science/behavioral-science-emergency-management-strategy-planning

Description

The Associate in Science in Behavioral Science provides an interdisciplinary approach to understanding human behavior within a global world view. Foundation courses at an associate level introduce behavioral science students to the biological, psychological, social, and cultural variables of human behavior. This degree prepares students for a smooth transition to the B.S. in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice. Emergency management strategy and planning involves multidimensional efforts to reduce our vulnerability to natural and human-caused disasters, to diminish the impact of disasters, and to prepare for, respond to, and recover from disasters. This option introduces students to emergency management approaches in order to develop skills and knowledge relating to emergency management strategy and policy development.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Behavioral Science		
PSY 410	Introduction to Psychology	4
PSY 525	Human Development	4
SOCI 410	Introduction to Sociology	4
Option in Emergency Management Strategy and Planning		
BEHS 445	Homeland Security and Emergency Management	4
BEHS 510	National Incident Management Systems (NIMS)	4
BEHS 610	Community Emergency Response	4
Total Credits		**24**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
SOCI 410	Introduction to Sociology	4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
PSY 525	Human Development	4
General Education Course		4
	Credits	**16**
Second Year		
Fall		
BEHS 445	Homeland Security and Emergency Management	4

BEHS 510	National Incident Management Systems (NIMS)	4
COM 480	Visual Communication	4
General Education Course		4
	Credits	**16**
Spring		
BEHS 610	Community Emergency Response	4
General Education Course		4
Elective		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in behavioral sciences, specifically, in critical infrastructure protection, regional and national security intelligence, and land and maritime border protection within the field of emergency management.
- Evaluate ethical principles of the behavioral sciences, specifically within human behavior, systems, intelligence analysis, and the use of new technologies in emergency management.
- Prepare for seamless transition to the Bachelor of Science in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice.

Behavioral Science Major: Human Services Option (A.S.)

https://www.unh.edu/program/associate-science/behavioral-science-human-services

Description

The Associate in Science in Behavioral Science provides an interdisciplinary approach to understanding human behavior within a global world view. Foundation courses at an associate level introduce behavioral science students to the biological, psychological, social, and cultural variables of human behavior. This degree prepares students for a smooth transition to the B.S. in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice. The human services option introduces students to the issues associated with providing appropriate services to people with diverse needs.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.

**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Behavioral Science		
PSY 410	Introduction to Psychology	4
PSY 525	Human Development	4
SOCI 410	Introduction to Sociology	4
Option in Human Services		
HMSV 424	Human Services and the Helping Process	4
HMSV 480	Case Management	4
Select one of the following:		4
COM 460	Interpersonal Communication and Group Dynamics	
HRM 635	Managing Conflict	
PSY 654	Counseling Theories	
Total Credits		**24**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4

PSY 410	Introduction to Psychology	4
SOCI 410	Introduction to Sociology	4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
HMSV 424	Human Services and the Helping Process	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
HMSV 480	Case Management	4
PSY 525	Human Development	4
General Education Course		4
	Credits	**16**
Spring		
HRM 635 or COM 460 or PSY 654	Managing Conflict or Interpersonal Communication and Group Dynamics or Counseling Theories	4
General Education Coure		4
Elective		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in behavioral sciences.
- Evaluate ethical principles of the behavioral sciences.
- Prepare for seamless transition to the Bachelor of Science in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice.

Behavioral Science Major: Wellness and Prevention Option (A.S.)

https://www.unh.edu/program/associate-science/behavioral-science-wellness-prevention

Description

The Associate in Science in Behavioral Science provides an interdisciplinary approach to understanding human behavior within a global world view. Foundation courses at an associate level introduce behavioral science students to the biological, psychological, social, and cultural variables of human behavior. This degree prepares students for a smooth transition to the B.S. in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice. The wellness and prevention option introduces students to the key factors that impact the mental and physical well-being of individuals as well as strategies for prevention and health promotion.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Behavioral Science		
PSY 410	Introduction to Psychology	4
PSY 525	Human Development	4
SOCI 410	Introduction to Sociology	4
Option in Wellness & Prevention		
HLTC 560	Health Behaviors: Theoretical Foundations for Health Education	4
SCI 502	Nutrition and Health	4
Select one of the following:		4
SCI 490	Human Biology	
SCI 508	Issues in Women's Health	
SCI 575	Introduction to Lifestyle Medicine	
Total Credits		**24**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the

student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
PSY 410	Introduction to Psychology	4
SOCI 410	Introduction to Sociology	4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
SCI 502	Nutrition and Health	4
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
HLTC 560	Health Behaviors: Theoretical Foundations for Health Education	4
PSY 525	Human Development	4
General Education Course		4
	Credits	**16**
Spring		
Select one of the following:		4
SCI 490	Human Biology	
SCI 508	Issues in Women's Health	
SCI 575	Introduction to Lifestyle Medicine	
General Education Course		4
Elective		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in behavioral sciences.
- Evaluate ethical principles of the behavioral sciences.
- Prepare for seamless transition to the Bachelor of Science in Applied Psychology, Health & Wellness, Human Services, or Criminal Justice.

Emergency Management Strategy and Planning Minor

https://www.unh.edu/program/minor/emergency-management-strategy-planning

Description

The minor in emergency management strategy and planning enables students to develop knowledge and skills related to emergency management strategy and policy development. It is a comprehensive study of the disaster management cycle, including emergency preparedness, mitigation, response, and recovery. The world is becoming a crowded place with a dense population and increasingly frequent natural and human-made hazards. Thus, there is a high demand for risk reduction and educated, prepared public leadership. Students who complete a minor in emergency management strategy and planning gain insight and knowledge that will strengthen their marketable skills in various international, federal, state, and local governments, private sector businesses, and nonprofit organizations.

NOTE: This minor may not be declared with the following majors: BS Applied Psychology: Emergency Management Strategy and Planning or BS Business Management: Emergency Management Strategy and Planning.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
BEHS 445	Homeland Security and Emergency Management	4
BEHS 510	National Incident Management Systems (NIMS)	4
BEHS 610	Community Emergency Response	4
BEHS 665	Disaster Management	4
BEHS 675	Terrorism: Domestic and International	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Attain proficiency in the fundamental skills needed to successfully participate in an emergency management team.
- Evaluate the integrated emergency management systems with resources and capabilities networked together, developing the means to address natural and human-made hazards.
- Explain how different partners and core capabilities contribute to emergency management in their community by building on the

resources necessary for developing a comprehensive emergency operations plan.

Business

- Accounting (Minor) CPSO (p. 492)
- Accounting and Finance Major (B.S.) (p. 492)
- Applied Studies Major: Management Option (B.S.) (p. 494)
- Business Major: Digital Marketing Option (A.S.) (p. 496)
- Business Major: Entrepreneurship and Innovation Option (A.S.) (p. 497)
- Business Major: Leadership, Change, and Social Responsibility Option (A.S.) (p. 499)
- Business Major: Management Option (A.S.) (p. 500)
- Business Major: Organization and Business Administration Option (A.S.) (p. 501)
- Business Management Major: Artificial Intelligence and Machine Learning Option (B.S.) (p. 502)
- Business Management Major: Data Analytics Option (B.S.) (p. 505)
- Business Management Major: Digital Marketing Option (B.S.) (p. 507)
- Business Management Major: Entrepreneurship and Innovation Option (B.S.) (p. 509)
- Business Management Major: Finance Option (B.S.) (p. 511)
- Business Management Major: Leadership, Change, and Social Responsibility Option (B.S.) (p. 513)
- Business Management Major: Management Option (B.S.) (p. 515)
- Business Management Major: Organization and Business Administration Option (B.S.) (p. 518)
- Business Management Major: Project Management Option (B.S.) (p. 520)
- Data Analytics Minor (p. 522)
- Digital Marketing Minor (p. 522)
- Entrepreneurship and Innovation Minor (p. 523)
- Finance Minor (p. 523)
- Human Resource Management Major (B.S.) (p. 524)
- Human Resource Management Minor (p. 526)
- Leadership, Change, and Social Responsibility Minor (p. 526)
- Management Major (A.B.S.) (p. 526)
- Management Minor (p. 528)
- Marketing Major (B.S.) (p. 528)
- Operations, Supply Chain and Logistics Management Major (B.S.) (p. 530)
- Operations, Supply Chain, and Logistics Minor (p. 532)
- Organization and Business Administration Minor (p. 533)

Accounting (Minor) CPSO

https://www.unh.edu/program/minor/accounting

Description

This minor provides foundational accounting skills for careers requiring bookkeeping and knowledge of organizational processes in the field. The program prepares graduates to help organizations manage budgets, utilize accounting information systems, and gain knowledge in taxation.

NOTE: This minor may not be declared with the following majors: BS Accounting and Finance or BS Business Management: Accounting.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Code	Title	Credits
Required Courses		
ACCT 533	Managerial Accounting	4
ACCT 550	Accounting Information Systems	4
ACCT 600	Intermediate Accounting I	4
ACCT 601	Intermediate Accounting II	4
ACCT 635	Taxation	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Acquire knowledge of professional accounting practices and research in the field of accounting.
- Demonstrate working knowledge of essentials in the field of accounting, enabling them to manage their personal and organizational bookkeeping.

Accounting and Finance Major (B.S.)

https://www.unh.edu/program/bachelor-science/accounting-finance

Description

The Bachelor of Science in Accounting and Finance blends content knowledge in accounting and finance with corresponding knowledge of organizational processes in the field. This program prepares graduates to help organizations better leverage assets, manage budgets, gain efficiencies, and maximize investments. The program provides a foundation for individuals whose future goals may include earning the credential of Certified Public Accountant.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Accounting and Finance		
Foundational Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ECO 470	Principles of Economics	4
MTH 504	Statistics	4
MGMT 410	Principles of Management	4
or MGMT 566	Organizational Behavior	
ACCT 532	Financial Accounting	4
ACCT 533	Managerial Accounting	4
Intermediate Courses		
ACCT 550	Accounting Information Systems	4
ACCT 600	Intermediate Accounting I	4
ACCT 601	Intermediate Accounting II	4
COM 590	Professional Communication	4
FNC 611	Money and Banking	4
FNC 665	Financial Management	4
FNC 675	Financial Modeling and Decision-Making	4
Advanced Courses		
ACCT 629	Cost Accounting	4
ACCT 635	Taxation	4
ACCT 710	Governmental and Not-For-Profit Accounting	4
ACCT 720	Auditing	4
ACCT 730	Advanced Data Analytics for Accounting Professionals	4
FNC 612	Investment Principles	4
Integrative Capstone:		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**80**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MGMT 410 or MGMT 566	Principles of Management or Organizational Behavior	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4

MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
ACCT 532	Financial Accounting	4
	Credits	**16**
Second Year		
Fall		
ACCT 533	Managerial Accounting	4
ACCT 550	Accounting Information Systems	4
COM 480	Visual Communication	4
ECO 470	Principles of Economics	4
	Credits	**16**
Spring		
COM 590	Professional Communication	4
FNC 611	Money and Banking	4
MTH 504	Statistics	4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
ACCT 600	Intermediate Accounting I	4
ACCT 601	Intermediate Accounting II	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
FNC 665	Financial Management	4
	Credits	**16**
Spring		
ACCT 710	Governmental and Not-For-Profit Accounting	4
ACCT 720	Auditing	4
FNC 612	Investment Principles	4
General Education Course		4
	Credits	**16**
Fourth Year		
Fall		
ACCT 629	Cost Accounting	4
ACCT 635	Taxation	4
FNC 675	Financial Modeling and Decision-Making	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
	Credits	**16**
Spring		
ACCT 730	Advanced Data Analytics for Accounting Professionals	4
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Demonstrate knowledge of essentials in the fields of accounting and finance to provide sound information through valid processes to users of accounting and financial services.
- Show thorough competence in understanding quantitative and qualitative methods as applied to problem-solving in the fields of accounting and finance.
- Communicate effectively, both verbally and in writing, to explain, evaluate, and present financial and accounting information to varied audiences.
- Employ integrity, ethics and social responsibility in accounting and financial practices.

Applied Studies Major: Management Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-studies-management

Description

This transfer-friendly program is designed for students with an Associate's Degree from a regionally accredited college in a technical or specialized field who already have the "hands- on" skills and want to develop the business competencies that will help them advance in their field in a management capacity. The program integrates the technical and general skills developed in an associate degree with the business competencies needed to succeed as a manager in their chosen profession. The focus is on the application of business skills to the student's professional field. Professional licensure, certification or training may serve as a foundation to this degree, upon approval by academic affairs.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prerequisite: Must have completed an Associate Degree or equivalent in a related applied discipline aligning with Management applied discipline aligning with Management.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Studies - Management		
Foundation Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
or MGMT 569	Budget Management	
Advanced Courses		
FNC 665	Financial Management	4
Leadership Elective		
Select one of the following:		4
HRM 580	Change Management	
or HRM 635	Managing Conflict	
or LD 600	Becoming an Effective Leader	
or LD 660	Leadership Theory	
or PSY 646	Psychology of Occupational Stress	
Legal/Ethical Issues Elective		
Select one of the following:		4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	
or MGMT 625	Legal and Ethical Issues in Business Management	
or MGMT 634	Contemporary Management Issues	
Management Elective		
Select one of the following:		4
Any upper level course with MGMT prefix		
Any course with HRM prefix		
Any course with OPS prefix		
MKT 618	Sales Management	
PADM 500	Introduction to Public Administration	
PSY 646	Psychology of Occupational Stress	
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**32**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence - For students with conferred associate degree.

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2

CRIT 501	Introduction to Critical Inquiry	4
MGMT 410	Principles of Management	4
Elective		4
	Credits	**16**
Spring		
ACCT 532 or MGMT 569	Financial Accounting or Budget Management	4
Select one of the following:		4
HRM 580	Change Management	
HRM 635	Managing Conflict	
LD 600	Becoming an Effective Leader	
LD 660	Leadership Theory	
PSY 646	Psychology of Occupational Stress	
Select one approved management elective		4
Elective		4
	Credits	**16**
Second Year		
Fall		
FNC 665	Financial Management	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Select one of the following:		4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	
MGMT 634	Contemporary Management Issues	
MGMT 625	Legal and Ethical Issues in Business Management	
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
Elective		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Identify patterns of individual and group behavior in organizations and apply management theories and approaches that enhance the effectiveness and efficiency of organizations.
- Demonstrate leadership skills that enhance organizational performance through application of theories of leadership, motivation, change management, conflict management and managing diversity.
- Apply accounting and finance skills and best practices to enhance the effectiveness of financial decision-making in organizations.
- Integrate legal and ethical principles into decision-making to assure organizational and individual adherence to corporate ethics and social responsibility.
- Integrate and apply management theories and techniques to a specific applied field through an in-depth capstone experience.

Business Major: Digital Marketing Option (A.S.)

https://www.unh.edu/program/associate-science/business-digital-marketing

Description

The Associate in Science degree in Business is designed for students interested in gaining a solid foundation in the field of business. The program includes an overview of general management theory and introduces students to the fundamental concepts of economics, marketing, finance, and organizational behavior. Students are able to further customize their degree by choosing from an array of three-course concentrations to gain specialized knowledge. This degree prepares students for a smooth transition to the B.S. in Business Management or related degree.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Business		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
Select two of the following:		8
Students should not take both ACCT 532 and MGMT 569 as part of their major elective group.		
ACCT 532	Financial Accounting	
or ECO 470	Principles of Economics	
or HRM 420	Human Resource Management	
or MGMT 569	Budget Management	
Option in Digital Marketing		
MKT 510	Principles of Marketing	4
MKT 517	Consumer Behavior	4
MKT 600	Social Media Marketing	4
or MKT 615	Digital Storytelling and Brand Management	
Total Credits		**28**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
MGMT 410	Principles of Management	4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
MKT 510	Principles of Marketing	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
ECO 470	Principles of Economics	4
or ACCT 532	or Financial Accounting	
or HRM 420	or Human Resource Management	
or MGMT 569	or Budget Management	
MKT 600	Social Media Marketing	4
or MKT 615	or Digital Storytelling and Brand Management	
General Education Course		4
	Credits	**16**
Spring		
MKT 517	Consumer Behavior	4
ACCT 532	Financial Accounting	4
or ECO 470	or Principles of Economics	
or HRM 420	or Human Resource Management	
or MGMT 569	or Budget Management	
General Education Course		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in business.
- Evaluate ethical principles that guide businesses.
- Prepare for seamless transition to the Bachelor of Science in Business Management program.

Business Major: Entrepreneurship and Innovation Option (A.S.)

https://www.unh.edu/program/associate-science/business-entrepreneurship-innovation

Description

The Associate in Science degree in Business is designed for students interested in gaining a solid foundation in the field of business. The program includes an overview of general management theory and introduces students to the fundamental concepts of economics, marketing, finance, and organizational behavior. Students are able to further customize their degree by choosing from an array of three-course concentrations to gain specialized knowledge. This degree prepares students for a smooth transition to the B.S. in Business Management or related degree.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Business		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
MKT 510	Principles of Marketing	4
Select one of the following:		4
Students should not take both ACCT 532 and MGMT 569 as part of their major elective group.		
ACCT 532	Financial Accounting	
or ECO 470	Principles of Economics	
or HRM 420	Human Resource Management	
or MGMT 569	Budget Management	
Option in Entrepreneurship and Innovation		
ENT 500	The Entrepreneurial Mindset	4
ENT 600	Launching and Managing Entrepreneurial Ventures	4
ENT 611	Entrepreneurial Marketing	4
Total Credits		**28**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
MGMT 410	Principles of Management	4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
MKT 510	Principles of Marketing	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
ENT 500	The Entrepreneurial Mindset	4
ENT 600	Launching and Managing Entrepreneurial Ventures	4
General Education Course		4
	Credits	**16**
Spring		
ENT 611	Entrepreneurial Marketing	4
Select one of the following:		4
ACCT 532	Financial Accounting	
ECO 470	Principles of Economics	
HRM 420	Human Resource Management	
MGMT 569	Budget Management	
General Education Course		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in business.
- Evaluate ethical principles that guide businesses.
- Prepare for seamless transition to the Bachelor of Science in Business Management program.

Business Major: Leadership, Change, and Social Responsibility Option (A.S.)

https://www.unh.edu/program/associate-science/business-leadership-change-social-responsibility

Description

The Associate in Science degree in Business is designed for students interested in gaining a solid foundation in the field of business. The program includes an overview of general management theory and introduces students to the fundamental concepts of economics, marketing, finance, and organizational behavior. Students are able to further customize their degree by choosing from an array of three-course concentrations to gain specialized knowledge. This degree prepares students for a smooth transition to the B.S. in Business Management or related degree.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Business		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
Select two of the following:		8
Students should not take both ACCT 532 and MGMT 569 as part of their major elective group.		
ACCT 532	Financial Accounting	
or ECO 470	Principles of Economics	
or HRM 420	Human Resource Management	
or MGMT 569	Budget Management	
or MKT 510	Principles of Marketing	
Option in Leadership, Change, and Social Responsibility		
LD 600	Becoming an Effective Leader	4
LD 660	Leadership Theory	4
MGMT 566	Organizational Behavior	4
Total Credits		**28**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
MGMT 410	Principles of Management	4
	Credits	**16**
Spring		
MGMT 566	Organizational Behavior	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
LD 600	Becoming an Effective Leader	4
LD 660	Leadership Theory	4
General Education Course		4
	Credits	**16**

Spring		
Select two of the following:		8
ACCT 532	Financial Accounting	
ECO 470	Principles of Economics	
HRM 420	Human Resource Management	
MGMT 569	Budget Management	
MKT 510	Principles of Marketing	
General Education Course		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in business.
- Evaluate ethical principles that guide businesses.
- Prepare for seamless transition to the Bachelor of Science in Business Management program.

Business Major: Management Option (A.S.)

https://www.unh.edu/program/associate-science/business-management

Description

The Associate in Science degree in Business is designed for students interested in gaining a solid foundation in the field of business. The program includes an overview of general management theory and introduces students to the fundamental concepts of economics, marketing, finance, and organizational behavior. Students are able to further customize their degree by choosing from an array of three-course concentrations to gain specialized knowledge. This degree prepares students for a smooth transition to the B.S. in Business Management or related degree.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Business		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
Select two of the following:		8
Students should not take both ACCT 532 and MGMT 569 as part of their major elective group.		
ACCT 532	Financial Accounting	
or ECO 470	Principles of Economics	
or HRM 420	Human Resource Management	
or MGMT 569	Budget Management	
or MKT 510	Principles of Marketing	
Option in Management		
MGMT 566	Organizational Behavior	4
LD 600	Becoming an Effective Leader	4
Select one of the following:		4
COM 460	Interpersonal Communication and Group Dynamics	
or ENT 500	The Entrepreneurial Mindset	
or HLTC 590	Introduction to Fiscal Management in Health Care	
or HRM 580	Change Management	
or MGMT 595	Practicum in Management	
Total Credits		**28**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2

COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
MGMT 410	Principles of Management	4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
MGMT 566	Organizational Behavior	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
LD 600	Becoming an Effective Leader	4
ACCT 532 or ECO 470 or HRM 420 or MGMT 569 or MKT 510	Financial Accounting or Principles of Economics or Human Resource Management or Budget Management or Principles of Marketing	4
General Education Course		4
	Credits	**16**
Spring		
ECO 470 or ACCT 532 or HRM 420 or MGMT 569 or MKT 510	Principles of Economics or Financial Accounting or Human Resource Management or Budget Management or Principles of Marketing	4
ENT 500 or COM 460 or HLTC 590 or HRM 580 or MGMT 595	The Entrepreneurial Mindset or Interpersonal Communication and Group Dynamics or Introduction to Fiscal Management in Health Care or Change Management or Practicum in Management	4
General Education Course		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in business.
- Evaluate ethical principles that guide businesses.
- Prepare for seamless transition to the Bachelor of Science in Business Management program.

Business Major: Organization and Business Administration Option (A.S.)

https://www.unh.edu/program/associate-science/business-organization-business-administration

Description

The Associate in Science degree in Business is designed for students interested in gaining a solid foundation in the field of business. The program includes an overview of general management theory and introduces students to the fundamental concepts of economics, marketing, finance, and organizational behavior. Students are able to further customize their degree by choosing from an array of three-course concentrations to gain specialized knowledge. This degree prepares students for a smooth transition to the B.S. in Business Management or related degree.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Option coursework. Students are allowed a maximum of one course overlap between the Major/Option and General Education areas.

Code	Title	Credits
Major in Business		
APST 405	Career Development and Planning	2

CMPL 402	Excel	2
MGMT 410	Principles of Management	4
Select two of the following:		8
Students should not take both ACCT 532 and MGMT 569 as part of their major elective group.		
ACCT 532	Financial Accounting	
or ECO 470	Principles of Economics	
or HRM 420	Human Resource Management	
or MGMT 569	Budget Management	
or MKT 510	Principles of Marketing	
Option in Organization and Business Administration		
Select three of the following:		12
ECO 470	Principles of Economics	
or ECO 580	International Economics	
or ENT 500	The Entrepreneurial Mindset	
or HRM 420	Human Resource Management	
or MGMT 595	Practicum in Management	
or MGMT 625	Legal and Ethical Issues in Business Management	
or MKT 510	Principles of Marketing	
or OPS 600	Operations Management	
Total Credits		**28**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, concentration or minor. Students will need 60 credits total to graduate with an associate degree.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
MGMT 410	Principles of Management	4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
ACCT 532	Financial Accounting	4
or ECO 470	or Principles of Economics	
or HRM 420	or Human Resource Management	
or MGMT 569	or Budget Management	
or MKT 510	or Principles of Marketing	
General Education Course		4
	Credits	**16**

Second Year

Fall		
COM 480	Visual Communication	4
ENT 500	The Entrepreneurial Mindset	4
or ECO 470	or Principles of Economics	
or ECO 580	or International Economics	
or HRM 420	or Human Resource Management	
or MGMT 595	or Practicum in Management	
or MGMT 625	or Legal and Ethical Issues in Business Management	
or MKT 510		
or OPS 600	or Principles of Marketing	
	or Operations Management	
HRM 420	Human Resource Management	4
or ACCT 532	or Financial Accounting	
or MGMT 569	or Budget Management	
or ECO 470	or Principles of Economics	
or MKT 510	or Principles of Marketing	
General Education Course		4
	Credits	**16**
Spring		
Select two of the following: Also may take ENT 500 or HRM 420 if these courses aren't used to fill a different major requirement.		8
ECO 470	Principles of Economics	
ECO 580	International Economics	
MGMT 595	Practicum in Management	
MGMT 625	Legal and Ethical Issues in Business Management	
MKT 510	Principles of Marketing	
OPS 600	Operations Management	
General Education Course		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the basic concepts, theories, and methods of inquiry in business.
- Evaluate ethical principles that guide businesses.
- Prepare for seamless transition to the Bachelor of Science in Business Management program.

Business Management Major: Artificial Intelligence and Machine Learning Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-management-artificial-intelligence-machine-learning

Description

The Bachelor of Science degree in Business Management offers students the appropriate breadth and depth of study with a concentration of five courses to pursue other areas of interest in management.

The degree is responsive to the education needs of businesses and includes an appropriate foundation for further graduate study. The outcomes-based program is built upon a foundation of six essential competencies that are integrated throughout the curriculum: critical thinking, effective oral and written communication, applied quantitative analysis, managing in a global environment, ethical practice, and leadership.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Business Management		
Foundational Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
MTH 504	Statistics	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
or MGMT 569	Budget Management	
Advanced Courses		
Select three of the following:		12
CMPL 643	Managing Information Technology	
ECO 470	Principles of Economics	
HRM 420	Human Resource Management	
MGMT 625	Legal and Ethical Issues in Business Management	
MKT 510	Principles of Marketing	
OPS 600	Operations Management	
Option in Artificial Intelligence and Machine Learning		
CMPL 570	Foundations of AI: A Business Perspective	4
CMPL 572	Foundations of Machine Learning	4
CMPL 610	Artificial Intelligence for Information Technology Professionals	4
CMPL 618	Mathematics for AI and Machine Learning	4
CMPL 750	Programming for AI with Python	4
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MGMT 410	Principles of Management	4
Elective		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
ECO 470 or HRM 420 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Principles of Economics or Human Resource Management or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
General Education Course		4
	Credits	**16**
Spring		
ACCT 532 or MGMT 569	Financial Accounting or Budget Management	4
HRM 420 or ECO 470 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Human Resource Management or Principles of Economics or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
Elective		4
CMPL 570	Foundations of AI: A Business Perspective	4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
CMPL 643 or ECO 470 or HRM 420 or MKT 510 or MGMT 625 or OPS 600	Managing Information Technology or Principles of Economics or Human Resource Management or Principles of Marketing or Legal and Ethical Issues in Business Management or Operations Management	4
CMPL 572	Foundations of Machine Learning	4
Elective		4
	Credits	**16**
Spring		
General Education Course		4
CMPL 610	Artificial Intelligence for Information Technology Professionals	4
CMPL 618	Mathematics for AI and Machine Learning	4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
CMPL 750	Programming for AI with Python	4
Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Apply business management theories related to production and operations, organizational behavior, human resource management, and leadership throughout various functional areas of organizations.
- Communicate organizational information effectively across an organization through the use of information systems, to a broad spectrum of audiences and in a variety of business situations.
- Apply quantitative tools and information systems in business analysis and decision-making.
- Critically analyze, research and articulate organizational strengths and weaknesses in areas such as competitive advantage, operations, human resources, marketing, financial and strategic positioning.
- Make legal and ethical individual and business decisions based on legalities, evaluation of business sustainability (environmental, socio/cultural, economic, institutional) and ethical practice.

- Manage and lead to enhance the effectiveness of individuals, teams, and business organizations in a global environment.
- Design intelligent systems that solve real world problems through the use of artificial intelligence, machine learning principles, algorithm development, model training and evaluation, ethical considerations, data handling, and deployment strategies.

Business Management Major: Data Analytics Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-management-data-analytics

Description

The Bachelor of Science degree in Business Management offers students the appropriate breadth and depth of study with a concentration of five courses to pursue other areas of interest in management.

The degree is responsive to the education needs of businesses and includes an appropriate foundation for further graduate study. The outcomes-based program is built upon a foundation of six essential competencies that are integrated throughout the curriculum: critical thinking, effective oral and written communication, applied quantitative analysis, managing in a global environment, ethical practice, and leadership.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Business Management		
Foundational Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
MTH 504	Statistics	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
or MGMT 569	Budget Management	
Advanced Courses		
Select three of the following:		12
CMPL 643	Managing Information Technology	
ECO 470	Principles of Economics	
HRM 420	Human Resource Management	
MGMT 625	Legal and Ethical Issues in Business Management	
MKT 510	Principles of Marketing	
OPS 600	Operations Management	
Option in Data Analytics		
DAT 510	Introduction to Data Analytics	4
DAT 535	Data Mining, Cleaning, and Visualization	4
DAT 610	Data Analytics and Technologies	4
DAT 620	Data Analytics in Business Intelligence	4
DAT 670	Advanced Data Analytics	4
Integrative Capstone		

MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MGMT 410	Principles of Management	4
Elective		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
ECO 470 or HRM 420 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Principles of Economics or Human Resource Management or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
General Education Course		4
	Credits	**16**
Spring		
ACCT 532 or MGMT 569	Financial Accounting or Budget Management	4
DAT 510	Introduction to Data Analytics	4
HRM 420 or ECO 470 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Human Resource Management or Principles of Economics or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
DAT 535	Data Mining, Cleaning, and Visualization	4
CMPL 643 or ECO 470 or HRM 420 or MKT 510 or MGMT 625 or OPS 600	Managing Information Technology or Principles of Economics or Human Resource Management or Principles of Marketing or Legal and Ethical Issues in Business Management or Operations Management	4
Elective		4
	Credits	**16**
Spring		
DAT 610	Data Analytics and Technologies	4
DAT 620	Data Analytics in Business Intelligence	4
General Education Course		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
DAT 670	Advanced Data Analytics	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Apply business management theories related to production and operations, organizational behavior, human resource management, and leadership throughout various functional areas of organizations.
- Communicate organizational information effectively across an organization through the use of information systems, to a broad spectrum of audiences and in a variety of business situations.
- Apply quantitative tools and information systems in business analysis and decision-making.
- Critically analyze, research and articulate organizational strengths and weaknesses in areas such as competitive advantage, operations, human resources, marketing, financial and strategic positioning.
- Make legal and ethical individual and business decisions based on legalities, evaluation of business sustainability (environmental, socio/cultural, economic, institutional) and ethical practice.
- Manage and lead to enhance the effectiveness of individuals, teams, and business organizations in a global environment.
- Employ a range of technical, statistical, and predictive methods to analyze and communicate quantitative data for business decisions.

Business Management Major: Digital Marketing Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-management-digital-marketing

Description

The Bachelor of Science degree in Business Management offers students the appropriate breadth and depth of study with a concentration of five courses to pursue other areas of interest in management.

The degree is responsive to the education needs of businesses and includes an appropriate foundation for further graduate study. The outcomes-based program is built upon a foundation of six essential competencies that are integrated throughout the curriculum: critical thinking, effective oral and written communication, applied quantitative analysis, managing in a global environment, ethical practice, and leadership.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Business Managment		
Foundational Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
MTH 504	Statistics	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
or MGMT 569	Budget Management	
MKT 510	Principles of Marketing	4

Advanced Courses		
Select two of the following:		8
CMPL 643	Managing Information Technology	
ECO 470	Principles of Economics	
HRM 420	Human Resource Management	
MGMT 625	Legal and Ethical Issues in Business Management	
OPS 600	Operations Management	
Option in Digital Marketing		
MKT 517	Consumer Behavior	4
MKT 615	Digital Storytelling and Brand Management	4
Select three of the following:		12
ART 512	Fundamentals of Design	
or COM 647	Writing for Visual Media	
or MKT 600	Social Media Marketing	
or MKT 612	Agile Marketing	
or MKT 645	Marketing Research	
or MKT 720	Digital Advertising	
or MKT 723	Marketing Design and Usability	
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MGMT 410	Principles of Management	4
Elective		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MKT 510	Principles of Marketing	4
MTH 504	Statistics	4
General Education Course		4
	Credits	**16**
Spring		
ACCT 532 or MGMT 569	Financial Accounting or Budget Management	4
ECO 470 or HRM 420 or CMPL 643 or MGMT 625 or OPS 600	Principles of Economics or Human Resource Management or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
MKT 517	Consumer Behavior	4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
MKT 615	Digital Storytelling and Brand Management	4
CMPL 643 or ECO 470 or HRM 420 or MGMT 625 or OPS 600	Managing Information Technology or Principles of Economics or Human Resource Management or Legal and Ethical Issues in Business Management or Operations Management	4
Elective		4
	Credits	**16**
Spring		
ART 512 or COM 647 or MKT 600 or MKT 612 or MKT 645 or MKT 720 or MKT 723	Fundamentals of Design or Writing for Visual Media or Social Media Marketing or Agile Marketing or Marketing Research or Digital Advertising or Marketing Design and Usability	4
COM 647 or ART 512 or MKT 600 or MKT 612 or MKT 645 or MKT 720 or MKT 723	Writing for Visual Media or Fundamentals of Design or Social Media Marketing or Agile Marketing or Marketing Research or Digital Advertising or Marketing Design and Usability	4
General Education Course		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4

MKT 600 or ART 512 or COM 647 or MKT 612 or MKT 645 or MKT 720 or MKT 723	Social Media Marketing or Fundamentals of Design or Writing for Visual Media or Agile Marketing or Marketing Research or Digital Advertising or Marketing Design and Usability	4
Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Apply business management theories related to production and operations, organizational behavior, human resource management, and leadership throughout various functional areas of organizations.
- Communicate organizational information effectively across an organization through the use of information systems, to a broad spectrum of audiences and in a variety of business situations.
- Apply quantitative tools and information systems in business analysis and decision-making.
- Critically analyze, research and articulate organizational strengths and weaknesses in areas such as competitive advantage, operations, human resources, marketing, financial and strategic positioning.
- Make legal and ethical individual and business decisions based on legalities, evaluation of business sustainability (environmental, socio/cultural, economic, institutional) and ethical practice.
- Manage and lead to enhance the effectiveness of individuals, teams, and business organizations in a global environment.
- Develop marketing models and methods informed by relevant theories to address marketing challenges.

Business Management Major: Entrepreneurship and Innovation Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-management-entrepreneurship-innovation

Description

The Bachelor of Science degree in Business Management offers students the appropriate breadth and depth of study with a concentration of five courses to pursue other areas of interest in management.

The degree is responsive to the education needs of businesses and includes an appropriate foundation for further graduate study. The outcomes-based program is built upon a foundation of six essential competencies that are integrated throughout the curriculum: critical thinking, effective oral and written communication, applied quantitative analysis, managing in a global environment, ethical practice, and leadership.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Business Management		
Foundational Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
MTH 504	Statistics	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
or MGMT 569	Budget Management	
Advanced Courses		
Select three of the following:		12
CMPL 643	Managing Information Technology	
ECO 470	Principles of Economics	
HRM 420	Human Resource Management	
MGMT 625	Legal and Ethical Issues in Business Management	
MKT 510	Principles of Marketing	
OPS 600	Operations Management	
Option in Entrepreneurship and Innovation		
ENT 500	The Entrepreneurial Mindset	4
ENT 600	Launching and Managing Entrepreneurial Ventures	4
ENT 611	Entrepreneurial Marketing	4
ENT 703	Entrepreneurial Finance	4
ENT 707	Legalities and Ethics of Entrepreneurship	4
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MGMT 410	Principles of Management	4
Elective		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
ECO 470 or HRM 420 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Principles of Economics or Human Resource Management or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
General Education Course		4
	Credits	**16**
Spring		
ACCT 532 or MGMT 569	Financial Accounting or Budget Management	4
MKT 510	Principles of Marketing	4
ENT 500	The Entrepreneurial Mindset	4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
ENT 600	Launching and Managing Entrepreneurial Ventures	4

HRM 420 or ECO 470 or CMPL 643 or MGMT 625 or OPS 600	Human Resource Management or Principles of Economics or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
Elective		4
	Credits	**16**
Spring		
ENT 611	Entrepreneurial Marketing	4
ENT 703	Entrepreneurial Finance	4
General Education Course		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
ENT 707	Legalities and Ethics of Entrepreneurship	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Apply business management theories related to production and operations, organizational behavior, human resource management, and leadership throughout various functional areas of organizations.
- Communicate organizational information effectively across an organization through the use of information systems, to a broad spectrum of audiences and in a variety of business situations.
- Apply quantitative tools and information systems in business analysis and decision-making.
- Critically analyze, research and articulate organizational strengths and weaknesses in areas such as competitive advantage, operations, human resources, marketing, financial and strategic positioning.
- Make legal and ethical individual and business decisions based on legalities, evaluation of business sustainability (environmental, socio/cultural, economic, institutional) and ethical practice.
- Manage and lead to enhance the effectiveness of individuals, teams, and business organizations in a global environment.
- Develop feasible entrepreneurial business strategies through clear stakeholder communication, command of the innovation process, funding resources, market research, and the formation of creative culture.

Business Management Major: Finance Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-management-finance

Description

The Bachelor of Science degree in Business Management offers students the appropriate breadth and depth of study with a concentration of five courses to pursue other areas of interest in management.

The degree is responsive to the education needs of businesses and includes an appropriate foundation for further graduate study. The outcomes-based program is built upon a foundation of six essential competencies that are integrated throughout the curriculum: critical thinking, effective oral and written communication, applied quantitative analysis, managing in a global environment, ethical practice, and leadership.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4

COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Business Management		
Foundational Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
MTH 504	Statistics	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
ECO 470	Principles of Economics	4
Advanced Courses		
Select two of the following:		8
CMPL 643	Managing Information Technology	
HRM 420	Human Resource Management	
MGMT 625	Legal and Ethical Issues in Business Management	
MKT 510	Principles of Marketing	
OPS 600	Operations Management	
Option in Finance		
ECO 580	International Economics	4
FNC 611	Money and Banking	4
FNC 612	Investment Principles	4
FNC 665	Financial Management	4
FNC 675	Financial Modeling and Decision-Making	4
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MGMT 410	Principles of Management	4
Elective		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
ECO 470	Principles of Economics	4
MTH 504	Statistics	4
General Education Course		4
	Credits	**16**
Spring		
ACCT 532	Financial Accounting	4
HRM 420 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Human Resource Management or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
ECO 580	International Economics	4
Elective		4
	Credits	**16**

Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
FNC 611	Money and Banking	4
MKT 510 or HRM 420 or CMPL 643 or MGMT 625 or OPS 600	Principles of Marketing or Human Resource Management or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
Elective		4
	Credits	**16**
Spring		
FNC 612	Investment Principles	4
FNC 665	Financial Management	4
General Education Course		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
FNC 675	Financial Modeling and Decision-Making	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Apply business management theories related to production and operations, organizational behavior, human resource management, and leadership throughout various functional areas of organizations.
- Communicate organizational information effectively across an organization through the use of information systems, to a broad spectrum of audiences and in a variety of business situations.
- Apply quantitative tools and information systems in business analysis and decision-making.
- Critically analyze, research and articulate organizational strengths and weaknesses in areas such as competitive advantage, operations, human resources, marketing, financial and strategic positioning.
- Make legal and ethical individual and business decisions based on legalities, evaluation of business sustainability (environmental, socio/cultural, economic, institutional) and ethical practice.
- Manage and lead to enhance the effectiveness of individuals, teams, and business organizations in a global environment.
- Employ financial planning, capital management, accounting, data analytics, reporting and regulation compliance methods to sustain the financial health of an organization.

Business Management Major: Leadership, Change, and Social Responsibility Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-management-leadership-change-social-responsibility

Description

The Bachelor of Science degree in Business Management offers students the appropriate breadth and depth of study with a concentration of five courses to pursue other areas of interest in management.

The degree is responsive to the education needs of businesses and includes an appropriate foundation for further graduate study. The outcomes-based program is built upon a foundation of six essential competencies that are integrated throughout the curriculum: critical thinking, effective oral and written communication, applied quantitative analysis, managing in a global environment, ethical practice, and leadership.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Business Management		
Foundational Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
MTH 504	Statistics	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
or MGMT 569	Budget Management	
Advanced Courses		
Select three of the following:		12
CMPL 643	Managing Information Technology	
ECO 470	Principles of Economics	
HRM 420	Human Resource Management	
MGMT 625	Legal and Ethical Issues in Business Management	
MKT 510	Principles of Marketing	
OPS 600	Operations Management	
Option in Leadership, Change and Social Responsibility		
HRM 740	Workplace Coaching	4
LD 600	Becoming an Effective Leader	4
LD 660	Leadership Theory	4
LD 704	Leading Teams	4
MGMT 566	Organizational Behavior	4
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MGMT 410	Principles of Management	4
Elective		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
ECO 470 or HRM 420 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Principles of Economics or Human Resource Management or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4

General Education Course		4
	Credits	**16**
Spring		
ACCT 532 or MGMT 569	Financial Accounting or Budget Management	4
HRM 420 or ECO 470 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Human Resource Management or Principles of Economics or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
MGMT 566	Organizational Behavior	4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
LD 600	Becoming an Effective Leader	4
LD 660	Leadership Theory	4
Elective		4
	Credits	**16**
Spring		
LD 704	Leading Teams	4
CMPL 643 or ECO 470 or HRM 420 or MKT 510 or MGMT 625 or OPS 600	Managing Information Technology or Principles of Economics or Human Resource Management or Principles of Marketing or Legal and Ethical Issues in Business Management or Operations Management	4
General Education Course		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
HRM 740	Workplace Coaching	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Apply business management theories related to production and operations, organizational behavior, human resource management, and leadership throughout various functional areas of organizations.
- Communicate organizational information effectively across an organization through the use of information systems, to a broad spectrum of audiences and in a variety of business situations.
- Apply quantitative tools and information systems in business analysis and decision-making.
- Critically analyze, research and articulate organizational strengths and weaknesses in areas such as competitive advantage, operations, human resources, marketing, financial and strategic positioning.
- Make legal and ethical individual and business decisions based on legalities, evaluation of business sustainability (environmental, socio/cultural, economic, institutional) and ethical practice.
- Manage and lead to enhance the effectiveness of individuals, teams, and business organizations in a global environment.
- Formulate comprehensive leadership strategies through emotional intelligence, team development, leadership styles, cultural awareness, accountability, and negotiation.

Business Management Major: Management Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-management-management

Description

The Bachelor of Science degree in Business Management offers students the appropriate breadth and depth of study with a concentration of five courses to pursue other areas of interest in management.

The degree is responsive to the education needs of businesses and includes an appropriate foundation for further graduate study. The outcomes-based program is built upon a foundation of six essential competencies that are integrated throughout the curriculum: critical thinking, effective oral and written communication, applied quantitative analysis, managing in a global environment, ethical practice, and leadership.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Business Management		
Foundational Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
MTH 504	Statistics	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
or MGMT 569	Budget Management	
Advanced Courses		
Select three of the following:		12
CMPL 643	Managing Information Technology	
ECO 470	Principles of Economics	
HRM 420	Human Resource Management	
MGMT 625	Legal and Ethical Issues in Business Management	
MKT 510	Principles of Marketing	
OPS 600	Operations Management	
Option in Management		
HRM 580	Change Management	4
HRM 635	Managing Conflict	4
LD 600	Becoming an Effective Leader	4
MGMT 566	Organizational Behavior	4
Select one of the following:		4
ENT 500	The Entrepreneurial Mindset	
or FNC 665	Financial Management	
or HLTC 590	Introduction to Fiscal Management in Health Care	
or HRM 740	Workplace Coaching	
or HRT 600	Hotel and Restaurant Management	
or HRT 660	Event, Meeting, and Conference Management	
or INST 702	The Learning Workplace	
or MGMT 595	Practicum in Management	
or MGMT 608	Fostering Inclusion and Diversity in the Workplace	
or MGMT 626	Project Management Strategies	
or MGMT 634	Contemporary Management Issues	
or MGMT 707	Nonprofit Management	
or MKT 615	Digital Storytelling and Brand Management	
or MKT 618	Sales Management	
or OPS 605	Quality Management	
or OPS 720	Fundamentals of LEAN Process Improvement	
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		Credits
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MGMT 410	Principles of Management	4
Elective		4
	Credits	**16**

Second Year

Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
ECO 470 or HRM 420 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Principles of Economics or Human Resource Management or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
General Education Course		4
	Credits	**16**
Spring		
ACCT 532 or MGMT 569	Financial Accounting or Budget Management	4
HRM 420 or ECO 470 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Human Resource Management or Principles of Economics or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
MGMT 566	Organizational Behavior	4
Elective		4
	Credits	**16**

Third Year

Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HRM 580	Change Management	4
CMPL 643 or ECO 470 or HRM 420 or MKT 510 or MGMT 625 or OPS 600	Managing Information Technology or Principles of Economics or Human Resource Management or Principles of Marketing or Legal and Ethical Issues in Business Management or Operations Management	4
Elective		4
	Credits	**16**
Spring		
HRM 635	Managing Conflict	4
LD 600	Becoming an Effective Leader	4
General Education Course		4
Elective		4
	Credits	**16**

Fourth Year

Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Select one of the following:		4
ENT 500	The Entrepreneurial Mindset	
FNC 665	Financial Management	
HLTC 590	Introduction to Fiscal Management in Health Care	
HRM 740	Workplace Coaching	
INST 702	The Learning Workplace	
MGMT 595	Practicum in Management	
MGMT 608	Fostering Inclusion and Diversity in the Workplace	
MGMT 626	Project Management Strategies	
MGMT 634	Contemporary Management Issues	
MGMT 707	Nonprofit Management	
MKT 615	Digital Storytelling and Brand Management	
MKT 618	Sales Management	
OPS 605	Quality Management	
OPS 720	Fundamentals of LEAN Process Improvement	
Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Apply business management theories related to production and operations, organizational behavior, human resource management, and leadership throughout various functional areas of organizations.

- Communicate organizational information effectively across an organization through the use of information systems, to a broad spectrum of audiences and in a variety of business situations.
- Apply quantitative tools and information systems in business analysis and decision-making.
- Critically analyze, research and articulate organizational strengths and weaknesses in areas such as competitive advantage, operations, human resources, marketing, financial and strategic positioning.
- Make legal and ethical individual and business decisions based on legalities, evaluation of business sustainability (environmental, socio/cultural, economic, institutional) and ethical practice.
- Manage and lead to enhance the effectiveness of individuals, teams, and business organizations in a global environment.

Business Management Major: Organization and Business Administration Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-management-organization-business-administration

Description

The Bachelor of Science degree in Business Management offers students the appropriate breadth and depth of study with a concentration of five courses to pursue other areas of interest in management.

The degree is responsive to the education needs of businesses and includes an appropriate foundation for further graduate study. The outcomes-based program is built upon a foundation of six essential competencies that are integrated throughout the curriculum: critical thinking, effective oral and written communication, applied quantitative analysis, managing in a global environment, ethical practice, and leadership.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Business Management		
Foundation Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
MTH 504	Statistics	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
or MGMT 569	Budget Management	
Advanced Courses		
Select three of the following:		12
CMPL 643	Managing Information Technology	
ECO 470	Principles of Economics	
HRM 420	Human Resource Management	
MGMT 625	Legal and Ethical Issues in Business Management	

MKT 510	Principles of Marketing	
OPS 600	Operations Management	
Option in Organization and Business Administration		
Select five of the following:		20
ACCT 533	Managerial Accounting	
or CMPL 643	Managing Information Technology	
or DAT 510	Introduction to Data Analytics	
or ECO 470	Principles of Economics	
or ECO 580	International Economics	
or ENT 500	The Entrepreneurial Mindset	
or FNC 665	Financial Management	
or FNC 675	Financial Modeling and Decision-Making	
or HRM 420	Human Resource Management	
or HRM 710	Law and Ethics in Human Resource Management	
or MGMT 595	Practicum in Management	
or MGMT 625	Legal and Ethical Issues in Business Management	
or MGMT 626	Project Management Strategies	
or MGMT 680	Global Business	
or MGMT 695	Internship in Management	
or MKT 510	Principles of Marketing	
or MKT 523	Introduction to Professional Sales	
or MKT 517	Consumer Behavior	
or OPS 605	Quality Management	
or OPS 720	Fundamentals of LEAN Process Improvement	
or SCM 610	Supply Chain Management	
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MGMT 410	Principles of Management	4
Elective		4
	Credits	**16**

Second Year

Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
ECO 470 or HRM 420 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Principles of Economics or Human Resource Management or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
General Education Course		4
	Credits	**16**
Spring		
ACCT 532 or MGMT 569	Financial Accounting or Budget Management	4
HRM 420 or ECO 470 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600	Human Resource Management or Principles of Economics or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management	4
Select one Organization and Business Adm Option Course		4
Elective		4
	Credits	**16**

Third Year

Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
CMPL 643 or ECO 470 or HRM 420 or MKT 510 or MGMT 625 or OPS 600	Managing Information Technology or Principles of Economics or Human Resource Management or Principles of Marketing or Legal and Ethical Issues in Business Management or Operations Management	4
Select one Organization and Business Adm Option Course		4
Elective		4
	Credits	**16**
Spring		
Select two Organization and Business Adm Option Courses		8
General Education Course		4
Elective		4
	Credits	**16**

Fourth Year

Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Select one Organization and Business Adm Option Course		4

Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Apply business management theories related to production and operations, organizational behavior, human resource management, and leadership throughout various functional areas of organizations.
- Communicate organizational information effectively across an organization through the use of information systems, to a broad spectrum of audiences and in a variety of business situations.
- Apply quantitative tools and information systems in business analysis and decision-making.
- Critically analyze, research and articulate organizational strengths and weaknesses in areas such as competitive advantage, operations, human resources, marketing, financial and strategic positioning.
- Make legal and ethical individual and business decisions based on legalities, evaluation of business sustainability (environmental, socio/cultural, economic, institutional) and ethical practice.
- Manage and lead to enhance the effectiveness of individuals, teams, and business organizations in a global environment.
- Design business structures, systems, performance metrics, assessment strategies, and change management policies to sustainably achieve organizational goals.

Business Management Major: Project Management Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-management-project-management

Description

The Bachelor of Science degree in Business Management offers students the appropriate breadth and depth of study with a concentration of five courses to pursue other areas of interest in management.

The degree is responsive to the education needs of businesses and includes an appropriate foundation for further graduate study. The outcomes-based program is built upon a foundation of six essential competencies that are integrated throughout the curriculum: critical thinking, effective oral and written communication, applied quantitative analysis, managing in a global environment, ethical practice, and leadership.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Business Management		
Foundational Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
MGMT 410	Principles of Management	4
MTH 504	Statistics	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
or MGMT 569	Budget Management	
Advanced Courses		
Select three of the following:		12
CMPL 643	Managing Information Technology	
ECO 470	Principles of Economics	
HRM 420	Human Resource Management	
MGMT 625	Legal and Ethical Issues in Business Management	
MKT 510	Principles of Marketing	
OPS 600	Operations Management	
Option in Project Management		
MGMT 626	Project Management Strategies	4
PM 611	Advanced Project Management	4
PM 613	Organizational Behavior and Projects	4
OPS 605	Quality Management	4
HRM 635	Managing Conflict	4
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MGMT 410	Principles of Management	4
Elective		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
ECO 470 or HRM 420 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600 or MGMT 626	Principles of Economics or Human Resource Management or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management or Project Management Strategies	4
General Education Course		4
	Credits	**16**
Spring		
ACCT 532 or MGMT 569	Financial Accounting or Budget Management	4
HRM 420 or ECO 470 or MKT 510 or CMPL 643 or MGMT 625 or OPS 600 or PM 611	Human Resource Management or Principles of Economics or Principles of Marketing or Managing Information Technology or Legal and Ethical Issues in Business Management or Operations Management or Advanced Project Management	4
MGMT 566	Organizational Behavior	4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HRM 580	Change Management	4
CMPL 643 or ECO 470 or HRM 420 or MKT 510 or MGMT 625 or OPS 600 or PM 613	Managing Information Technology or Principles of Economics or Human Resource Management or Principles of Marketing or Legal and Ethical Issues in Business Management or Operations Management or Organizational Behavior and Projects	4
Elective		4
	Credits	**16**
Spring		
HRM 635	Managing Conflict	4
LD 600	Becoming an Effective Leader	4

General Education Course		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Select one of the following:		4
ENT 500	The Entrepreneurial Mindset	
FNC 665	Financial Management	
HLTC 590	Introduction to Fiscal Management in Health Care	
HRM 740	Workplace Coaching	
INST 702	The Learning Workplace	
MGMT 595	Practicum in Management	
MGMT 608	Fostering Inclusion and Diversity in the Workplace	
MGMT 626	Project Management Strategies	
MGMT 634	Contemporary Management Issues	
MGMT 707	Nonprofit Management	
MKT 615	Digital Storytelling and Brand Management	
MKT 618	Sales Management	
OPS 605	Quality Management	
OPS 720	Fundamentals of LEAN Process Improvement	
Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 798 or MGMT 795	Integrative Capstone: Strategic Management Experience or Integrative Capstone: Industry-Based Internship	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Apply business management theories related to production and operations, organizational behavior, human resource management, and leadership throughout various functional areas of organizations.
- Communicate organizational information effectively across an organization through the use of information systems, to a broad spectrum of audiences and in a variety of business situations.
- Apply quantitative tools and information systems in business analysis and decision-making.
- Critically analyze, research and articulate organizational strengths and weaknesses in areas such as competitive advantage, operations, human resources, marketing, financial and strategic positioning.
- Make legal and ethical individual and business decisions based on legalities, evaluation of business sustainability (environmental, socio/cultural, economic, institutional) and ethical practice.
- Manage and lead to enhance the effectiveness of individuals, teams, and business organizations in a global environment.
- Employ standard project management processes to achieve the stated project objectives, working within the identified constraints to deliver business value.

Data Analytics Minor

https://www.unh.edu/program/minor/data-analytics

Description

The minor in data analytics addresses the knowledge, skills, and ability to answer data-driven questions within a student's discipline or industry. Students will have the opportunity to prepare data for analysis, draw conclusions based on data, and present the results of data analysis.

NOTE: This minor may not be declared with the following majors: BS Business Management: Data Analytics or BS Computer Information Technology: Data Analytics.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
DAT 510	Introduction to Data Analytics	4
DAT 535	Data Mining, Cleaning, and Visualization	4
DAT 610	Data Analytics and Technologies	4
DAT 620	Data Analytics in Business Intelligence	4
DAT 670	Advanced Data Analytics	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Utilize the data analytics process to address industry-specific challenges.
- Practice data mining, cleaning, and visualization techniques.
- Define ethical and legal issues related to data analytics.

Digital Marketing Minor

https://www.unh.edu/program/minor/digital-marketing

Description

The focus of marketing revolves around the consumer and a minor in digital marketing will allow the student to identify consumers, evaluate consumer interest, and meet consumer needs and wants through

marketing research, consumer behaviors, and customer relations on a local, national, and global level. Students with a minor in marketing can complement their major areas of study with essential skills that provide students with insight into the modern external functional area of business.

NOTE: This minor may not be declared with the following majors: BS Marketing or BS Business Management: Digital Marketing.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
MKT 517	Consumer Behavior	4
MKT 612	Agile Marketing	4
MKT 615	Digital Storytelling and Brand Management	4
Select two of the following:		8
ART 512	Fundamentals of Design	
COM 647	Writing for Visual Media	
MKT 600	Social Media Marketing	
MKT 645	Marketing Research	
MKT 720	Digital Advertising	
MKT 723	Marketing Design and Usability	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Apply relevant marketing theories and models to contemporary marketing issues and professional practice.
- Identify and discuss promotional skills and competencies for marketing products, services, and ideas.
- Analyze contemporary marketing problems and situations.

Entrepreneurship and Innovation Minor

https://www.unh.edu/program/minor/entrepreneurship-innovation

Description

The minor in entrepreneurship and innovation is designed to provide the student the opportunity to develop entrepreneurship knowledge, skills, and ability applicable to a wide range of organizational settings, including startup business, new ventures, and social ventures including not- for-profit organizations. The minor in entrepreneurship is suitable for those who might want to have their own business or work in an entrepreneurial environment.

NOTE: This minor may not be declared with the following major: BS Business Management: Entrepreneurship and Innovation or BS Computer Information Technology: Entrepreneurship and Innovation.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
ENT 500	The Entrepreneurial Mindset	4
ENT 600	Launching and Managing Entrepreneurial Ventures	4
ENT 611	Entrepreneurial Marketing	4
ENT 703	Entrepreneurial Finance	4
ENT 707	Legalities and Ethics of Entrepreneurship	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Understand and assess the feasibility of entrepreneurial endeavors.
- Effectively utilize their analytical skills to solve entrepreneurial problems.
- Demonstrate the ability to find an attractive market that can be reached economically.

Finance Minor

https://www.unh.edu/program/minor/finance

Description

This minor provides foundational skills for careers related to finance. It can also prepare the student to be a member of the financial management team in small or mid-sized enterprises or for self-employment.

NOTE: This minor may not be declared with the following major: BS Accounting and Finance or BS Business Management: Finance.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
ECO 580	International Economics	4
FNC 611	Money and Banking	4
FNC 612	Investment Principles	4
FNC 665	Financial Management	4
FNC 675	Financial Modeling and Decision-Making	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Demonstrate working knowledge of essentials in the field of finance so as to accurately interpret financial data and processes to users of financial services and business financial processes.
- Ask critical questions about information and research in the field of Finance.

Human Resource Management Major (B.S.)

https://www.unh.edu/program/bachelor-science/human-resource-management

Description

The Bachelor of Science in Human Resource Management provides a strong foundation in business essentials with specialization in the areas of employee development and organizational performance. Studies include the fundamentals for H.R. professionals, as well as explorations in the management of change, conflict, diversity, and in the psychosocial dimension of organizations. Graduates will be prepared for careers that allow them to contribute to strategic advancement in business settings, in the nonprofit sector, and in the public sphere.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Human Resource Management		
Foundation Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
HRM 420	Human Resource Management	4
HRM 470	Human Resource Application in Today's Organizations	4
MGMT 566	Organizational Behavior	4
MTH 504	Statistics	4
or MGMT 569	Budget Management	
Intermediate Courses		
HRM 580	Change Management	4
HRM 635	Managing Conflict	4
LD 600	Becoming an Effective Leader	4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
Advanced Courses		
HRM 660	Recruitment, Selection, and Employee Development	4
HRM 680	Compensation and Performance Management	4
HRM 710	Law and Ethics in Human Resource Management	4
HRM 740	Workplace Coaching	4
OPS 720	Fundamentals of LEAN Process Improvement	4
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4

or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
HRM 420	Human Resource Management	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
MGMT 566	Organizational Behavior	4
	Credits	**16**

Second Year

Fall		
COM 480	Visual Communication	4
HRM 470	Human Resource Application in Today's Organizations	4
MTH 504 or MGMT 569	Statistics or Budget Management	4
General Education Course		4
	Credits	**16**
Spring		
HRM 580	Change Management	4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
General Education Course		4
Elective		4
	Credits	**16**

Third Year

Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HRM 635	Managing Conflict	4
HRM 680	Compensation and Performance Management	4
Elective		4
	Credits	**16**
Spring		
HRM 660	Recruitment, Selection, and Employee Development	4
HRM 710	Law and Ethics in Human Resource Management	4
LD 600	Becoming an Effective Leader	4
Elective		4
	Credits	**16**

Fourth Year

Fall		
HRM 740	Workplace Coaching	4
OPS 720	Fundamentals of LEAN Process Improvement	4
Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Gain competency in the fundamentals of human resources management.
- Engage key concepts in organizational development.
- Explore psychosocial dimensions and their impact on individuals and organizations.
- Demonstrate awareness of and competency with diverse cultures in a global workforce.
- Analyze information effectively to guide evidence-based decision-making.
- Recognize and apply ethical principles and legal standards appropriate to human resources and business practice.
- Advance organizational objectives by deploying human resources knowledge in the context of strategic management.

Human Resource Management Minor

https://www.unh.edu/program/minor/human-resource-management

Description

This minor develops skills for the varied and significant roles that the human resources professional fills in an organization. The minor focuses on developing leadership and managerial skills for the HR professional as an agent of organizational change in the workplace.

NOTE: This minor may not be declared with the following major: BS Human Resource Management.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
HRM 420	Human Resource Management	4
HRM 470	Human Resource Application in Today's Organizations	4
HRM 710	Law and Ethics in Human Resource Management	4
MGMT 566	Organizational Behavior	4
Select one of the following:		4
HRM 580	Change Management	
HRM 635	Managing Conflict	
HRM 660	Recruitment, Selection, and Employee Development	
HRM 680	Compensation and Performance Management	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Apply key concepts and legal/ethical frameworks in human resources to effectively resolving real or potential challenges in organizations.
- Ask critical questions about information and research in the field of human resources.

Leadership, Change, and Social Responsibility Minor

https://www.unh.edu/program/minor/leadership-change-social-responsibility

Description

Leadership is the process of motivating people to achieve project goals. Leadership varies from management, and not all leaders are managers. Courses within this minor allow students to define leadership, explore the leadership qualities within one's self and others, investigate the role of leadership in organizations, and assess leadership theories. Within the minor, students will survey and discuss multiple methodologies used to evaluate teams. Students will analyze how organizational dynamics and structure impact the leader, limit or increase their power, and the ability to perform their job.

NOTE: This minor may not be declared with the following major: BS Business Management: Leadership, Change, and Social Responsibility.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
LD 600	Becoming an Effective Leader	4
LD 660	Leadership Theory	4
LD 704	Leading Teams	4
MGMT 566	Organizational Behavior	4
HRM 740	Workplace Coaching	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Use basic as well as advanced management terms and theories.
- Compare and contrast multiple motivational and management models.
- Identify and apply multiple conflict resolution techniques.
- Identify a leader's source and types of power.
- Survey and discuss multiple methodologies used to evaluate teams.
- Analyze how organizational dynamics and structure impact the leader, limit or increase their power, and the ability to perform their job.

Management Major (A.B.S.)

https://www.unh.edu/program/applied-bachelor-science/management

Description

The **Applied Bachelor of Science (A.B.S.) in Management** is a comprehensive 90-credit, three-year program designed to develop students' leadership capabilities, critical thinking, and professional competencies essential for today's evolving business landscape. This applied program emphasizes practical learning, strategic decision-making, and problem-solving skills grounded in real-world business scenarios. The curriculum integrates core business principles with current industry practices and prepares students for a wide range of management roles across various sectors. Aligned with key competencies valued by employers, the program equips graduates with the analytical tools, organizational insight, and communication strategies necessary to lead teams, manage resources, and drive organizational success.

Requirements

Degree Requirements

Minimum Credit Requirement: 90 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral

Core Curriculum Required: General Education Program

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402	Math for Our World	4
or MTH 504	Statistics	
or MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prerequisite: Must have completed an Associate Degree or equivalent in a related applied discipline aligning with Management applied discipline aligning with Management.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

A minimum grade of C- is required in all Major coursework.

Code	Title	Credits
Foundation Courses		
CMPL 402	Excel	2
HRM 420	Human Resource Management	4
MGMT 410	Principles of Management	4
Intermediate Courses		
ACCT 532	Financial Accounting	4
ACCT 533	Managerial Accounting	4
DAT 510	Introduction to Data Analytics	4
MKT 510	Principles of Marketing	4
Advanced Courses		
APST 605A	Practicum Business & Technology	4
COM 660W	Leveraging AI in Workplace Communication	4
FNC 665	Financial Management	4
LD 600	Becoming an Effective Leader	4
MGMT 625	Legal and Ethical Issues in Business Management	4
Integrative Capstone		
APST 695A	Integrative Capstone	4
Total Credits		**50**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
	Credits	**16**
Spring		
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
ECO 470	Principles of Economics	4
Knowledge of Human Thought and Expression		4
Knowledge of the Physical and Natural World		4
	Credits	**16**
Second Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
CMPL 402	Excel	2
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
MGMT 410	Principles of Management	4
	Credits	**14**
Spring		
ACCT 532	Financial Accounting	4
ACCT 533	Managerial Accounting	4

APST 605A	Practicum Business & Technology	4
LD 600	Becoming an Effective Leader	4
	Credits	**16**
Third Year		
Fall		
HRM 420	Human Resource Management	4
MGMT 625	Legal and Ethical Issues in Business Management	4
MKT 510	Principles of Marketing	4
FNC 665	Financial Management	4
	Credits	**16**
Spring		
DAT 510	Introduction to Data Analytics	4
COM 660W	Leveraging AI in Workplace Communication	4
APST 695A	Integrative Capstone	4
	Credits	**12**
	Total Credits	**90**

Student Learning Outcomes

Program Learning Outcomes

- Apply core business principles to solve organizational challenges and support ethical decision-making across diverse industries.
- Demonstrate leadership and communication skills that enhance team performance and organizational outcomes.
- Incorporate ethical principles and social responsibility into business.
- Assess personal and professional growth in relation to management competencies and career objectives.

Disclosures

Degree Type: Applied Bachelor of Science (A.B.S.)

UNH's Applied Bachelor's in Management 90-credit, three-year degree is not equivalent to a traditional, four-year baccalaureate degree. It is an accelerated degree program that some graduate programs, professional schools, and employers may not recognize or accept. Any student who wishes to may, at any time during their course of study, seamlessly transition from the 90-credit, three-year to the 120-credit, four-year Management degree program. UNH's applied bachelor's programs are eligible for Title IV federal financial aid. However, students who leave UNH having completed an applied bachelor's degree but later choose to return to UNH or attend another institution to complete additional undergraduate credits, either to earn a certificate of post-baccalaureate studies or to earn a second bachelor's degree, will not be eligible for federal grant aid and may have limited eligibility for other federal aid programs. Please reach out to UNH CPSO Admissions at 1-855-472-4255 or admissions.cps@unh.edu if you have questions or need additional information.

Management Minor

https://www.unh.edu/program/minor/management

Description

This minor provides a foundation in management theory and practice for those interested in public or private sector management. Students may choose electives that complement their career interests and primary area of study.

NOTE: This minor may not be declared with the following major: BS Applied Studies- Management or BS Business Management: Management.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
HRM 580	Change Management	4
or HRM 635	Managing Conflict	
LD 600	Becoming an Effective Leader	4
MGMT 410	Principles of Management	4
MGMT 566	Organizational Behavior	4
Select one of the following:		4
ENT 500	The Entrepreneurial Mindset	
FNC 665	Financial Management	
HLTC 590	Introduction to Fiscal Management in Health Care	
HRT 600	Hotel and Restaurant Management	
HRT 660	Event, Meeting, and Conference Management	
HRM 635	Managing Conflict	
HRM 740	Workplace Coaching	
INST 702	The Learning Workplace	
MGMT 595	Practicum in Management	
MGMT 608	Fostering Inclusion and Diversity in the Workplace	
MGMT 626	Project Management Strategies	
MGMT 634	Contemporary Management Issues	
MGMT 707	Nonprofit Management	
MKT 615	Digital Storytelling and Brand Management	
OPS 605	Quality Management	
OPS 720	Fundamentals of LEAN Process Improvement	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Utilize knowledge of managerial theory and practice in application to the professional private and public sector of business.
- Ask critical questions about information and research in the field of Management.

Marketing Major (B.S.)

https://www.unh.edu/program/bachelor-science/marketing

Description

The Marketing degree provides a strong foundation in the key knowledge areas of the field. Studies combine essential business courses with specialized learning in such topics as global marketing, consumer behavior, branding, and social media. Graduates will be prepared to deploy creative and data-driven approaches to advance organizational objectives and business strategy.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Marketing		
Foundation Courses		
APST 405	Career Development and Planning	2
ART 512	Fundamentals of Design	4
CMPL 402	Excel	2
MGMT 569	Budget Management	4
MKT 510	Principles of Marketing	4
Intermediate Courses		
COM 647	Writing for Visual Media	4
DAT 510	Introduction to Data Analytics	4
MKT 517	Consumer Behavior	4
MKT 600	Social Media Marketing	4
Advanced Courses		
MKT 612	Agile Marketing	4
MKT 615	Digital Storytelling and Brand Management	4
MKT 618	Sales Management	4
MKT 645	Marketing Research	4
MKT 720	Digital Advertising	4
MKT 723	Marketing Design and Usability	4
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate

students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MKT 510	Principles of Marketing	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
General Education Course		4
	Credits	**16**
Second Year		
Fall		
ART 512	Fundamentals of Design	4
COM 480	Visual Communication	4
MGMT 569	Budget Management	4
Elective		4
	Credits	**16**
Spring		
DAT 510	Introduction to Data Analytics	4
MKT 517	Consumer Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
MKT 600	Social Media Marketing	4
MKT 612	Agile Marketing	4
MKT 615	Digital Storytelling and Brand Management	4
	Credits	**16**
Spring		
COM 647	Writing for Visual Media	4
Elective		4
MKT 618	Sales Management	4
MKT 723	Marketing Design and Usability	4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601		4
MKT 645	Marketing Research	4
MKT 720	Digital Advertising	4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Identify the activities/issues in marketing that may present ethical challenges and articulate the consequences associated with the unethical behavior.
- Apply relevant marketing theories and models to contemporary marketing issues and professional practice.
- Recognize the role of marketing in today's global society.
- Demonstrate multi-channel communication skills including oral, written, audio/visual and digital.
- Identify and analyze contemporary marketing problems and situations.
- Collect, review, and analyze consumer and sales data to make informed marketing decisions.

Operations, Supply Chain and Logistics Management Major (B.S.)

https://www.unh.edu/program/bachelor-science/operations-supply-chain-logistics-management

Description

The Bachelor of Science degree in Operations, Supply Chain, and Logistics Management provides a sound education in business with an emphasis on operations, including supply chain management, project management, quantitative methods, and quality control. Operations, Supply Chain, and Logistics Management degree graduates understand how to be effective as managers and leaders, and are equipped to make strategic contributions through knowledge of operations, supply chain, logistics, production, quality, project management, transportation, and technology.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Operations, Supply Chain, and Logistics Management		
Foundation Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
DAT 510	Introduction to Data Analytics	4
Intermediate Courses		
MGMT 410	Principles of Management	4
ECO 470	Principles of Economics	4
MTH 504	Statistics	4
MGMT 569	Budget Management	4
CMPL 643	Managing Information Technology	4
MGMT 626	Project Management Strategies	4
Advanced Courses		
OPS 600	Operations Management	4
SCM 610	Supply Chain Management	4
SCM 570	Supply Chain Purchasing Management	4
OPS 610	Sustainable Facility Operations	4
SCM 715	Logistics Management	4
OPS 720	Fundamentals of LEAN Process Improvement	4
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4
or MGMT 797	Integrative Capstone: Industry-Based Project	
or MGMT 798	Integrative Capstone: Strategic Management Experience	
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
MGMT 410	Principles of Management	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4

MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
General Education Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
MTH 504	Statistics	4
MGMT 569	Budget Management	4
Elective		4
	Credits	**16**
Spring		
ECO 470	Principles of Economics	4
DAT 510	Introduction to Data Analytics	4
CMPL 643	Managing Information Technology	4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
SCM 570	Supply Chain Purchasing Management	4
MGMT 626	Project Management Strategies	4
OPS 720	Fundamentals of LEAN Process Improvement	4
Elective		4
	Credits	**16**
Spring		
OPS 610	Sustainable Facility Operations	4
SCM 715	Logistics Management	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
OPS 600	Operations Management	4
SCM 610	Supply Chain Management	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
	Credits	**16**
Spring		
MGMT 795 or MGMT 797 or MGMT 798	Integrative Capstone: Industry-Based Internship or Integrative Capstone: Industry-Based Project or Integrative Capstone: Strategic Management Experience	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate knowledge of the theory and practice of operations, supply chain, and logistics management.
- Apply qualitative and quantitative methods to problem-solving in business analysis and operational decision-making.
- Manage and lead strategically to enhance performance for individuals, teams, and organizations.
- Analyze operational, supply chain, and logistics strengths and weaknesses from multiple perspectives, including ethical, legal, fiscal, and quality.
- Communicate and interact productively in culturally responsive ways with a diverse and changing workforce.

Operations, Supply Chain, and Logistics Minor

https://www.unh.edu/program/minor/operations-supply-chain-logistics

Description

This minor explores how the fast and efficient flow of products in from suppliers and out to customers ensures growth in revenue that would otherwise be unobtainable.

NOTE: This minor may not be declared with the following major: BS Operations, Supply Chain, and Logistics Management.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Minor Requirements

Code	Title	Credits
Required Courses		
SCM 570	Supply Chain Purchasing Management	4
OPS 600	Operations Management	4
SCM 610	Supply Chain Management	4
SCM 715	Logistics Management	4
OPS 720	Fundamentals of LEAN Process Improvement	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Develop knowledge of supply chain management theories, approaches and practices.

- Demonstrate an understanding of logistics and operations, the global business environment, purchasing practices, and relationship management through course projects.

Organization and Business Administration Minor

https://www.unh.edu/program/minor/organization-business-administration

Description

The minor in organization and business administration is designed to provide the student with content and additional in-depth education in marketing, management, accounting, information systems, legal, and ethical issues in business.

NOTE: This minor may not be declared with the following major: BS Business Management: Business Administration.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Minor Requirements

Code	Title	Credits
Requirements		
Select 5 courses from the following:		20
ACCT 533	Managerial Accounting	
CMPL 643	Managing Information Technology	
ECO 470	Principles of Economics	
ECO 580	International Economics	
ENT 500	The Entrepreneurial Mindset	
FNC 665	Financial Management	
FNC 675	Financial Modeling and Decision-Making	
HRM 420	Human Resource Management	
HRM 710	Law and Ethics in Human Resource Management	
MGMT 595	Practicum in Management	
MGMT 625	Legal and Ethical Issues in Business Management	
MGMT 626	Project Management Strategies	
MGMT 680	Global Business	
MGMT 695	Internship in Management	
MKT 510	Principles of Marketing	
MKT 517	Consumer Behavior	
MKT 523	Introduction to Professional Sales	
OPS 605	Quality Management	
OPS 720	Fundamentals of LEAN Process Improvement	
SCM 610	Supply Chain Management	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Learn the foundations of the various business disciplines and how they function together to create a sustainable business operation.
- Research business methods and how to base decisions from your findings.
- Assess legal and ethical issues in business situations.

Criminal Justice

- Court Advocacy Minor (p. 533)
- Criminal Justice Major (B.S.) (p. 533)
- Criminal Justice Minor (p. 535)

Court Advocacy Minor

https://www.unh.edu/program/minor/court-advocacy

Description

This minor explores the issues associated with supporting crime victims as they navigate the criminal justice system. Students will study criminal behavior, the criminal justice system, and the issues of both child and adult victims of crime.

NOTE: This minor may not be declared with the following majors: BS Human Services: Court Advocacy or BS Applied Psychology: Court Advocacy.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
CRIM 410	Introduction to Criminology	4
CRIM 555	The Criminal Justice System	4
CRIM 645	Crime Victim Rights and Remedies	4
SOCI 675	Child Abuse and Neglect	4
SOSC 710	Social Stratification and Inequality	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Identify the needs of crime victims (both child and adult).
- Describe the behaviors of victims and criminals.

Criminal Justice Major (B.S.)

https://www.unh.edu/program/bachelor-science/criminal-justice

Description

This program is designed to prepare individuals for entry or advancement in the following fields related to Criminal Justice: law enforcement, corrections, probation and parole, administration, domestic violence

prevention, mental health, and other community-based programs that exist for victims, offenders, and their families.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Criminal Justice		
Foundation courses		
CRIM 410	Introduction to Criminology	4
CRIM 555	The Criminal Justice System	4
MTH 504	Statistics	4
POL 554	Law and Society	4
Intermediate Courses		
CRIM 600	Crime Prevention and Control	4
CRIM 645	Crime Victim Rights and Remedies	4
IDIS 560	Research Methods in the Behavioral Sciences	4
Criminal Justice Elective		
Select one of the following:		4
BEHS 445	Homeland Security and Emergency Management	
or BEHS 675	Terrorism: Domestic and International	
or CMPL 525	Foundations of Cybersecurity	
or CRIM 425	Juvenile Justice	
or DAT 510	Introduction to Data Analytics	
or HMSV 424	Human Services and the Helping Process	
or HRM 580	Change Management	
or HRM 635	Managing Conflict	
or MGMT 608	Fostering Inclusion and Diversity in the Workplace	
or POL 450	American Government and Politics	
or PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 646	Psychology of Occupational Stress	
or PSY 654	Counseling Theories	
or PSY 685	Principles of Psychopathology	
or SOCI 601	Society and the Individual	
or SOCI 675	Child Abuse and Neglect	
or SOSC 445	Race & Diversity in the U.S.	
or SOSC 680	Stress and the Family	
or SOSC 710	Social Stratification and Inequality	
Advanced Courses		
CRIM 680	Corrections, Probation and Parole	4
CRIM 707	Constitutional Law	4
CRIM 725	Ethical Decision Making in the Criminal Justice System	4
Upper Level Criminal Justice Elective		
Select one of the following:		4
BEHS 675	Terrorism: Domestic and International	
or HRM 635	Managing Conflict	
or MGMT 608	Fostering Inclusion and Diversity in the Workplace	
or PSY 602	Theories of Personality	
or PSY 603	Crisis Intervention	
or PSY 646	Psychology of Occupational Stress	
or PSY 654	Counseling Theories	
or PSY 685	Principles of Psychopathology	
or SOCI 601	Society and the Individual	
or SOCI 675	Child Abuse and Neglect	
or SOSC 680	Stress and the Family	
or SOSC 710	Social Stratification and Inequality	

Integrative Capstone		
CRIM 795	Integrative Capstone: Internship in Criminal Justice	4
or CRIM 797	Integrative Capstone: Project in Criminal Justice	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
CRIM 410	Introduction to Criminology	4
CRIM 555	The Criminal Justice System	4
ENG 420	The Writing Process	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
POL 554	Law and Society	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
CRIM 600	Crime Prevention and Control	4
MTH 504	Statistics	4
General Education Course		4
	Credits	**16**
Spring		
CRIM 645	Crime Victim Rights and Remedies	4
CRIM 680	Corrections, Probation and Parole	4
Criminal Justice Elective		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 560	Research Methods in the Behavioral Sciences	4
Uppler Level Criminal Justice Elective		4
Elective		4
	Credits	**16**
Spring		
CRIM 707	Constitutional Law	4
General Education Course		4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
CRIM 725	Ethical Decision Making in the Criminal Justice System	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
Elective		4
	Credits	**16**
Spring		
CRIM 797 or CRIM 795	Integrative Capstone: Project in Criminal Justice or Integrative Capstone: Internship in Criminal Justice	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Employ theories, policies, and practices of criminal justice to analyze contemporary societal issues through psychosocial, cultural, ethical, and political lenses.
- Integrate relevant legal statutes, codes of ethics, and established ethical decision-making models to justify courses of action in professional criminal justice settings.
- Critically interpret criminal justice-related information, such as research findings, case files, and reports, and convey their meaning and implications to diverse audiences.
- Develop evidence-based recommendations for discipline-specific policy or practice through analysis of the structures and functions of the criminal justice system and the constitutional principles that guide their operation.

Criminal Justice Minor

https://www.unh.edu/program/minor/criminal-justice

Description

This minor explores the roles of law enforcement, corrections, and criminals within the U.S. criminal justice system. Students will gain a foundational understanding of the theories and practices of individuals in each aspect of the criminal justice system.

NOTE: This minor may not be declared with the following majors: BS Criminal Justice.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
CRIM 410	Introduction to Criminology	4
CRIM 555	The Criminal Justice System	4
CRIM 600	Crime Prevention and Control	4
Select one of the following:		4
CRIM 425	Juvenile Justice	
CRIM 645	Crime Victim Rights and Remedies	
SOCI 675	Child Abuse and Neglect	
Select one of the following:		4
CRIM 680	Corrections, Probation and Parole	
CRIM 707	Constitutional Law	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Identify behaviors of criminals and victims.
- Define the roles of law enforcement, corrections, and criminals within the justice system.
- Describe the complex relationship between victims, law enforcement, criminals, and corrections.

Education (Educator Preparation Programs)

Education programs present opportunities for both current and potential educators at every level. Ideal for teachers who wish to further their education as their career progresses, these programs are designed to serve the evolving needs of today's educators.

Programs

- Adult Learning & Development (Minor) (p. 536)
- Applied Studies Major: Education and Training Option (B.S.) (p. 537)
- Early Childhood Development (A.S.) (p. 538)
- Early Childhood Development (B.S.) (p. 539)
- Early Childhood Development Minor (p. 541)
- Early Childhood Education / Early Childhood Education and Early Childhood Special Education (B.S.) (p. 541)
- English Language Arts / Early Childhood Education and Early Childhood Special Education (B.S.) (p. 544)
- English Language Arts / Elementary Education / General Special Education (B.S.) (p. 546)
- English Language Arts / General Special Education (B.S.) (p. 549)
- Math Studies / Elementary Education / General Special Education (B.S.) (p. 551)
- Math Studies / General Special Education (B.S.) (p. 553)
- Math Studies, Middle Level (B.S.) (p. 556)
- Math Studies, Middle Level / General Special Education (B.S.) (p. 558)
- Math Studies, Upper Level (B.S.) (p. 560)
- Social Studies / Elementary Education / General Special Education (B.S.) (p. 563)
- Social Studies / General Special Education (B.S.) (p. 565)

Adult Learning & Development (Minor)

https://www.unh.edu/program/minor/adult-learning-development

Description

This minor provides knowledge to maximize adult learning in training, consulting, or instructional environments. Students will develop an understanding of the unique qualities, motivations, and capabilities of the adult student.

NOTE: This minor may not be declared with the following major: BS Applied Studies Option in Education and Training.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Code	Title	Credits
Required Courses		
INST 701	Teaching and Learning in Adulthood	4
INST 702	The Learning Workplace	4
or INST 703	Instructional Design and Interactive Learning	
INST 797	Program Development and Learning	4
PSY 630	Psychology of Adulthood	4
PSY 646	Psychology of Occupational Stress	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Develop sufficient understanding of adult learner behaviors and capacities to enable the student to respond effectively to possible professional scenarios.

- Apply knowledge of adult development and learning to solving problems in the context of the student's professional field.
- Ask critical questions about information and research in the field.

Applied Studies Major: Education and Training Option (B.S.)

https://www.unh.edu/program/bachelor-science/applied-studies-education-training

Description

This option is designed for students with an area of technical or other specific expertise who wish to train or teach adults. Courses in this option focus on adult learning and the theory and practice of teaching adults. An Associate Degree in an applied field from a regionally accredited college or the equivalent is the required foundation for this program.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prerequisite: Must have completed an associate degree or equivalent in a related applied discipline aligning with Education & Training

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Applied Studies-Education and Training		
Intermediate Courses		
INST 701	Teaching and Learning in Adulthood	4
INST 702	The Learning Workplace	4
Advanced Courses		
INST 703	Instructional Design and Interactive Learning	4
PSY 646	Psychology of Occupational Stress	4
INST 797	Program Development and Learning	4
Total Credits		**20**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence - for students with conferred associate degree

First Year		
Fall		**Credits**
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
INST 701	Teaching and Learning in Adulthood	4
Elective		4
Elective		4
	Credits	**16**
Spring		
INST 702	The Learning Workplace	4
PSY 646	Psychology of Occupational Stress	4
Elective		4
Elective		4
	Credits	**16**
Second Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
INST 703	Instructional Design and Interactive Learning	4
Elective		4
Elective		4
	Credits	**16**
Spring		
INST 797	Program Development and Learning	4
Elective		4
Elective		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the concepts, theories, and methods of inquiry pertinent to education and training of adults.
- Design teaching or training that integrates knowledge of an applied field with adult learning and theory.
- Apply ethical principles that inform the practice of teaching adults.

Early Childhood Development (A.S.)

https://www.unh.edu/program/associate-science/early-childhood-development

Description

The Associate in Science degree in Early Childhood Development has been designed to provide a thorough understanding of the young child. This program creates a broad perspective on child and family development patterns. Students develop skills to guide children in their early education.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 470		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Concentration coursework. Students are allowed a maximum of one course overlap between the Concentration and General Education areas.

Code	Title	Credits
Major in Early Childhood Development		
EDC 501	Foundations of Early Childhood Education	4
EDC 502	Creative Arts in Early Childhood Education	4
EDC 503	Language and Literacy Development	4
EDC 504	Health, Safety & Nutrition in Early Childhood Settings	4
EDC 505	Mathematics and Science in Early Childhood Education	4
EDC 606	Young Children with Exceptionalities in Early Childhood Settings	4
EDC 607	Early Childhood Program Administration	4
Total Credits		**28**

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
EDC 501	Foundations of Early Childhood Education	4
General Education Course		4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
EDC 502	Creative Arts in Early Childhood Education	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470	Child Development	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
EDC 503	Language and Literacy Development	4
EDC 504	Health, Safety & Nutrition in Early Childhood Settings	4
General Education Course		4
	Credits	**16**
Spring		
EDC 505	Mathematics and Science in Early Childhood Education	4
EDC 606	Young Children with Exceptionalities in Early Childhood Settings	4
EDC 607	Early Childhood Program Administration	4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in basic concepts, theories, and methods in Early Childhood Development.
- Evaluate ethical principles of Early Childhood Development.
- Communicate effectively, both in writing and verbally, with families, children, co-workers and stakeholders in Early Childhood settings.

Early Childhood Development (B.S.)

https://www.unh.edu/program/bachelor-science/early-childhood-development

Description

This program is designed for individuals seeking career options in early childhood care settings. Courses in this program prepare individuals to be qualified early childhood education and childcare providers. This major offers a model curriculum which addresses standards set by the National Association for the Education of Young Children. The completion of this degree qualifies individuals for the Early Childhood credential through the New Hampshire Child Development Bureau, Department of Health and Human Services. This degree does not lead to public school teacher licensure through the Department of Education.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Early Childhood Development		
Foundational Courses		
PSY 470	Child Development	4
EDC 501	Foundations of Early Childhood Education	4
EDC 502	Creative Arts in Early Childhood Education	4
EDC 503	Language and Literacy Development	4
EDC 504	Health, Safety & Nutrition in Early Childhood Settings	4
EDC 505	Mathematics and Science in Early Childhood Education	4
Intermediate Courses		
PSY 480	Infant and Toddler Development	4
EDC 601	Positive Behavior Guidance in Early Childhood Education	4
EDC 602	Learning and Early Childhood Environments	4
EDC 606	Young Children with Exceptionalities in Early Childhood Settings	4
EDC 607	Early Childhood Program Administration	4
Advanced Courses		
EDC 712	Observation and Assessment in Early Childhood Education	4
EDC 713	Family and Community Relations in Early Childhood Education	4
EDC 715W	Enhancing Supervision through Mentoring	4
Integrative Capstone		
EDC 797	Practicum: Professionalism in Early Childhood Education	4
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
EDC 501	Foundations of Early Childhood Education	4
ENG 420	The Writing Process	4
PSY 470	Child Development	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
EDC 502	Creative Arts in Early Childhood Education	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
EDC 503	Language and Literacy Development	4
EDC 504	Health, Safety & Nutrition in Early Childhood Settings	4
General Education Course		4
	Credits	**16**
Spring		
EDC 505	Mathematics and Science in Early Childhood Education	4
Elective		4
	Credits	**8**
Third Year		
Fall		
PSY 480	Infant and Toddler Development	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
EDC 601	Positive Behavior Guidance in Early Childhood Education	4
EDC 602	Learning and Early Childhood Environments	4
	Credits	**16**
Spring		
EDC 606	Young Children with Exceptionalities in Early Childhood Settings	4
General Education Course		4
EDC 607	Early Childhood Program Administration	4
	Credits	**12**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
EDC 712	Observation and Assessment in Early Childhood Education	4
EDC 713	Family and Community Relations in Early Childhood Education	4
Elective		4
	Credits	**16**

Spring		
EDC 715W	Enhancing Supervision through Mentoring	4
EDC 797	Practicum: Professionalism in Early Childhood Education	4
Elective		4
	Credits	**12**
	Total Credits	**112**

Student Learning Outcomes

Program Learning Outcomes

- Create inclusive, nurturing, and culturally responsive learning environments aligned with the developmentally appropriate practices framework.
- Analyze strategies for building and sustaining respectful, reciprocal partnerships with families and communities.
- Compare and analyze various assessment strategies to understand and support each child's development and learning, inform instruction, and engage families in the assessment process.
- Plan, implement, and evaluate equitable, engaging curriculum and teaching practices that promote progress across developmental domains and reflect children's diverse needs, interests, and cultural contexts.
- Integrate knowledge of academic content areas (language, literacy, math, science, social studies, arts, physical development) into meaningful, interdisciplinary learning experiences for young children.
- Plan for continuous professional development in the field of early childhood education to create equitable, high quality learning experiences for birth to age 8 children.

Early Childhood Development Minor

https://www.unh.edu/program/minor/early-childhood-development

Description

The Early Childhood Development minor is designed for individuals seeking to supplement non-education degrees with courses that may be applied towards DHHS credentialing in early childhood. Courses in this minor model curriculum standards set forth by the National Association for the Education of Young Children.

NOTE: This minor may not be declared with the following majors: BS Early Childhood Development or BS Early Childhood Education with Teacher Certification in Early Childhood Education and Early Childhood Special Education.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Minor Requirements

Code	Title	Credits
Required Courses		
EDC 501	Foundations of Early Childhood Education	4
EDC 601	Positive Behavior Guidance in Early Childhood Education	4
EDC 606	Young Children with Exceptionalities in Early Childhood Settings	4
EDC 712	Observation and Assessment in Early Childhood Education	4
PSY 470	Child Development	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Develop knowledge and skills in promoting child development with an understanding and application of developmentally appropriate practice.
- Apply knowledge and skills to develop, implement, and evaluate meaningful curriculum for all children.

Early Childhood Education / Early Childhood Education and Early Childhood Special Education (B.S.)

https://www.unh.edu/program/bachelor-science/early-childhood-education

Description

Individuals who complete this dual licensure program will be eligible for the New Hampshire Department of Education teacher licensure in Early Childhood (N-3) and Early Childhood Special Education (Birth-Age 8). Additionally, completion of this degree qualifies individuals for the New Hampshire Child Development Bureau, New Hampshire Department of Health and Human Services Credential. The Early Childhood license will prepare individuals to teach children in public schools beginning at the nursery school level to Grade 3, and Early Childhood Special Education license will prepare individuals to work with infants, toddlers and children who are at risk of being identified as needing special education services or who are already identified as needing special education services.

This program is for qualified participants working or volunteering in approved programs or education settings. The key components of this program include mentorship of the teacher candidates by highly skilled professionals, the hands-on experience of working with children in educational settings, and the opportunity to build your teaching capacity over time. Graduates of this program will be eligible for licensure and highly qualified in both early childhood and early childhood special education.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Early Childhood Education and Early Childhood Special Education		
EDC 501	Foundations of Early Childhood Education	4
PSY 470	Child Development	4
MTH 504	Statistics	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
Introductory Level Education Courses		
EDC 700	Introduction to Clinical Experience	1
EDC 701	Special Education Law	4
EDC 702	Young Children with Exceptionalities, Birth to Age 8	4
EDC 703	The Dynamic Role of the Special Educator	4
Intermediate Level Education Courses		
EDC 704	Assessment of Young Children in Early Childhood and Early Childhood Spec. Education, Birth to Age 8	4
EDC 705	Collaboration, Consultation and Teaming In Early Childhood & Early Childhood Special Education	4
EDC 706	IFSPs, IEPs, and Transition Planning - Birth to Age 8	2
EDC 707	Behavior Interventions for Young Children in Early Childhood/Early Childhood Special Education	4
Advanced Level Education Courses		
EDC 708	Science, Technology, Engineering & Mathematics in Early Childhood and Early Childhood Spec Education	4
EDC 709	Teaching Language Arts and Literacy in Early Childhood and Early Childhood Special Education	6
EDC 710	Curriculum, Assessment and Instruction in Early Childhood/Early Childhood SPED - Birth to Age 8	4
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**57**

1 Required prior to beginning the last 60 credits of degree program
2 Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure.
- **Basic Academic Skills Assessment (BASA): Pearson Essential Academic Skills or Praxis Core Academic Skills For Educators exam** required. Passing BASA exam scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience
- **Licensure Exams: Pearson Early Childhood, Pearson Early Childhood Special Education and Pearson Foundations of Reading** exams required. Students must attempt to pass these exams prior to taking the Culminating Teaching Experience & Seminar. Passing exam scores are required for state licensure.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
PSY 470	Child Development	4
Elective		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
General Education Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
PSY 525	Human Development	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
MTH 504	Statistics	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
	Credits	**16**
Third Year		
Fall		
EDC 700	Introduction to Clinical Experience Nonclinical; Complete CHRC Process	1
EDC 701	Special Education Law	4
EDC 702	Young Children with Exceptionalities, Birth to Age 8	4
Elective		4
Elective		4
	Credits	**17**
Spring		
EDC 501	Foundations of Early Childhood Education	4
EDC 703	The Dynamic Role of the Special Educator Clinical A	4
EDC 707	Behavior Interventions for Young Children in Early Childhood/Early Childhood Special Education Clinical A	4
	Credits	**12**
Summer		
EDC 704	Assessment of Young Children in Early Childhood and Early Childhood Spec. Education, Birth to Age 8	4
EDC 706	IFSPs, IEPs, and Transition Planning - Birth to Age 8	2
	Credits	**6**
Fourth Year		
Fall		
EDC 705	Collaboration, Consultation and Teaming In Early Childhood & Early Childhood Special Education Clinical B	4
EDC 709	Teaching Language Arts and Literacy in Early Childhood and Early Childhood Special Education Clinical A	6
EDC 708	Science, Technology, Engineering & Mathematics in Early Childhood and Early Childhood Spec Education Clinical A	4
	Credits	**14**
Spring		
EDC 710	Curriculum, Assessment and Instruction in Early Childhood/Early Childhood SPED - Birth to Age 8 Clinical A	4
EDC 798	Culminating Teaching Experience and Seminar Clinical A	4
	Credits	**8**
	Total Credits	**121**

Note: Only 1 Clinical A course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.

Disclosures

Early Childhood Education/Early Childhood Education and Early Childhood Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Early Childhood (N-3) and Early Childhood Special Education

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

English Language Arts / Early Childhood Education and Early Childhood Special Education (B.S.)

https://www.unh.edu/program/bachelor-science/english-language-arts-early-childhood-education-early-childhood-special-education

Description

Individuals who complete this dual licensure program will be eligible for New Hampshire Department of Education teacher licensure in Early Childhood (Birth-Age 8) and Early Childhood Special Education (Birth-Age 8). The program aligns with the NH Department of Education's standards for teacher credentialing.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A **minimum GPA of 3.0** is required for state licensure.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in English Language Arts / Early Childhood Education and Early Childhood Special Education		
COM 590	Professional Communication	4
ENG 450	Introduction to Literature	4
ENG 505	Introduction to Language and Linguistics	4
ENG 555	Children's Literature	4
or ENG 585	Short Fiction	
ENG 615	Young Adult Literature	4
or ENG 620	Multicultural Perspectives through Literature	
ENG 604	Creative Writing	4
ENG 645	Disability in Literature and Culture	4
ENG 675	Survey of Classic Literature Through Film	4
ENG 730	The Graphic Novel	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
PSY 470	Child Development	4
EDC 501	Foundations of Early Childhood Education	4
Introductory Level Education Courses		
EDC 700	Introduction to Clinical Experience	1
EDC 701	Special Education Law	4
EDC 702	Young Children with Exceptionalities, Birth to Age 8	4

EDC 703	The Dynamic Role of the Special Educator	4
Intermediate Level Education Courses		
EDC 704	Assessment of Young Children in Early Childhood and Early Childhood Spec. Education, Birth to Age 8	4
EDC 705	Collaboration, Consultation and Teaming In Early Childhood & Early Childhood Special Education	4
EDC 706	IFSPs, IEPs, and Transition Planning - Birth to Age 8	2
EDC 707	Behavior Interventions for Young Children in Early Childhood/Early Childhood Special Education	4
Advanced Level Education Courses		
EDC 708	Science, Technology, Engineering & Mathematics in Early Childhood and Early Childhood Spec Education	4
EDC 709	Teaching Language Arts and Literacy in Early Childhood and Early Childhood Special Education	6
EDC 710	Curriculum, Assessment and Instruction in Early Childhood/Early Childhood SPED - Birth to Age 8	4
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**89**

[1] Required prior to beginning the last 60 credits of degree program
[2] Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for Teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure
- **Basic Academic Skills Assessment (BASA)** required. Passing Exam scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience
- **Pearson Early Childhood Exam and Early Childhood Special Education Exam-** Passing scores must be submitted prior to taking the Culminating Teaching Experience & Seminar
- **Pearson Foundations of Reading Exam** required. Passing Pearson Foundations of Reading Exam Scores must be submitted prior to taking the Culminating Teaching Experience & Seminar.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
General Education Course		4
	Credits	**16**
Spring		
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
ENG 450	Introduction to Literature	4
PSY 525	Human Development	4
	Credits	**16**
Second Year		
Fall		
ENG 555 or ENG 585	Children's Literature or Short Fiction	4
ENG 620 or ENG 615	Multicultural Perspectives through Literature or Young Adult Literature	4
ENG 675	Survey of Classic Literature Through Film	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
	Credits	**16**
Spring		
COM 590	Professional Communication	4
ENG 505	Introduction to Language and Linguistics	4
ENG 604	Creative Writing	4
PSY 470	Child Development	4
	Credits	**16**
Summer		
ENG 645	Disability in Literature and Culture	4
EDC 501	Foundations of Early Childhood Education	4
	Credits	**8**
Third Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
EDC 700	Introduction to Clinical Experience Nonclinical; Complete CHRC Process	1
EDC 701	Special Education Law	4
EDC 702	Young Children with Exceptionalities, Birth to Age 8	4
	Credits	**13**
Spring		
EDC 703	The Dynamic Role of the Special Educator	4
EDC 705	Collaboration, Consultation and Teaming In Early Childhood & Early Childhood Special Education	4
EDC 707	Behavior Interventions for Young Children in Early Childhood/Early Childhood Special Education Clinical A	4
	Credits	**12**

Summer		
EDC 704	Assessment of Young Children in Early Childhood and Early Childhood Spec. Education, Birth to Age 8	4
EDC 706	IFSPs, IEPs, and Transition Planning - Birth to Age 8	2
	Credits	**6**
Fourth Year		
Fall		
EDC 709	Teaching Language Arts and Literacy in Early Childhood and Early Childhood Special Education Clinical A	6
EDC 708	Science, Technology, Engineering & Mathematics in Early Childhood and Early Childhood Spec Education Clinical A	4
	Credits	**10**
Spring		
EDC 710	Curriculum, Assessment and Instruction in Early Childhood/Early Childhood SPED - Birth to Age 8 Clinical A	4
EDC 798	Culminating Teaching Experience and Seminar Clinical A	4
	Credits	**8**
	Total Credits	**121**

Note: Only 1 Clinical A course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.
- Apply content knowledge to develop PK-12 students' skills in reading, writing, and critical thinking.
- Identify and explore connections between content areas and teaching methodologies.
- Create learning experiences to foster PK-12 students' independent, collaborative, and creative problem-solving skills.
- Devise strategies to facilitate mastery of course content using technology.

Disclosures

English Language Arts/Early Childhood Education and Early Childhood Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Early Childhood (Birth-Age 8) and Early Childhood Special Education (Birth-Age 8)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

English Language Arts / Elementary Education / General Special Education (B.S.)

https://www.unh.edu/program/bachelor-science/english-language-arts-elementary-education-general-special-education

Description

Individuals who complete this dual licensure program will be eligible for the New Hampshire Department of Education teacher licensure in Elementary Education (K-5 or K-8) and General Special Education (ages 5-22). The program aligns with the NH Department of Education's standards for teacher credentialing.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as

noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A **minimum GPA of 3.0** is required for state licensure.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in English Language Arts / Elementary Education and General Special Education		
COM 590	Professional Communication	4
ENG 450	Introduction to Literature	4
ENG 505	Introduction to Language and Linguistics	4
ENG 555	Children's Literature	4
or ENG 585	Short Fiction	
ENG 604	Creative Writing	4
ENG 615	Young Adult Literature	4
or ENG 620	Multicultural Perspectives through Literature	
ENG 645	Disability in Literature and Culture	4
ENG 675	Survey of Classic Literature Through Film	4
ENG 730	The Graphic Novel	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
EDC 500	Foundations of Education	4
Introductory Level Education Courses		
EDC 700	Introduction to Clinical Experience	1
EDC 701	Special Education Law	4
EDC 703	The Dynamic Role of the Special Educator	4
EDC 716	Students with Disabilities	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
Intermediate Level Education Courses		
EDC 718	Transition Planning & Developing IEPs	2
EDC 719	Using Technology to Teach Social Studies	4
EDC 721	Assessment of Students with Disabilities	4
EDC 722	Strategies for Teaching Science	4
Advanced Level Education Courses		
EDC 723	Teaching Language Arts and Literacy	6
EDC 724	Elementary School Mathematics Methods	4
or EDC 733	Middle Level Mathematics Methods	
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**85**

[1] Required prior to beginning the last 60 credits of degree program

[2] Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure.
- **Basic Academic Skills Assessment (BASA): Pearson Essential Academic Skills or Praxis Core Academic Skills For Educators Exam** required. Passing BASA Exam scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience.
- **Licensure Exams: Pearson Special Education, Pearson Foundations of Reading, and Pearson General Curriculum Subtests I and II.**

Candidates who qualify for K-8 licensure must also complete a Middle School Content Exam and 15 content area credits.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate

students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
General Education Course		4
	Credits	**16**
Spring		
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
ENG 450	Introduction to Literature	4
PSY 525	Human Development	4
	Credits	**16**
Second Year		
Summer		
ENG 645	Disability in Literature and Culture	4
EDC 700	Introduction to Clinical Experience	1
	Credits	**5**
Fall		
ENG 555 or ENG 585	Children's Literature or Short Fiction	4
ENG 615 or ENG 620	Young Adult Literature or Multicultural Perspectives through Literature	4
ENG 675	Survey of Classic Literature Through Film	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
	Credits	**16**
Spring		
ENG 505	Introduction to Language and Linguistics	4
ENG 604	Creative Writing	4
ENG 730	The Graphic Novel	4
COM 590	Professional Communication	4
	Credits	**16**
Third Year		
Summer		
EDC 718	Transition Planning & Developing IEPs	2
EDC 721	Assessment of Students with Disabilities	4
	Credits	**6**
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
EDC 703	The Dynamic Role of the Special Educator	4
EDC 500	Foundations of Education	4
EDC 701	Special Education Law	4
	Credits	**16**
Spring		
EDC 716	Students with Disabilities [Nonclinical]	4
EDC 719	Using Technology to Teach Social Studies [Clinical A]	4
EDC 717	Positive Behavior Guidance and Student Engagement [Clinical A]	4
	Credits	**12**
Fourth Year		
Fall		
EDC 723	Teaching Language Arts and Literacy	6
EDC 724 or EDC 733	Elementary School Mathematics Methods or Middle Level Mathematics Methods	4
	Credits	**10**
Spring		
EDC 722	Strategies for Teaching Science	4
EDC 798	Culminating Teaching Experience and Seminar [Clinical A]	4
	Credits	**8**
	Total Credits	**121**

Note: Only 1 Clinical A course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.
- Apply content knowledge to develop PK-12 students' skills in reading, writing, and critical thinking.
- Identify and explore connections between content areas and teaching methodologies.
- Create learning experiences to foster PK-12 students' independent, collaborative, and creative problem-solving skills.
- Devise strategies to facilitate mastery of course content using technology.

Disclosures

English Language Arts/Elementary Education and General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Elementary Education (K-5 or K-8) and General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

English Language Arts / General Special Education (B.S.)

https://www.unh.edu/program/bachelor-science/english-language-arts-general-special-education

Description

Individuals who complete this program will be eligible for the New Hampshire Department of Education teacher licensure in General Special Education (ages 5-22). The program aligns with the NH Department of Education's standards for teacher credentialing.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A **minimum GPA of 3.0** is required for state licensure.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in English Language Arts/General Special Education		
COM 590	Professional Communication	4
ENG 450	Introduction to Literature	4
ENG 505	Introduction to Language and Linguistics	4
ENG 555	Children's Literature	4
or ENG 585	Short Fiction	
ENG 615	Young Adult Literature	4
or ENG 620	Multicultural Perspectives through Literature	

ENG 604	Creative Writing	4
ENG 645	Disability in Literature and Culture	4
ENG 675	Survey of Classic Literature Through Film	4
ENG 730	The Graphic Novel	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
EDC 500	Foundations of Education	4
Introductory Level Education Courses		
EDC 700	Introduction to Clinical Experience	1
EDC 701	Special Education Law	4
EDC 703	The Dynamic Role of the Special Educator	4
EDC 716	Students with Disabilities	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
Intermediate Level Education Courses		
EDC 718	Transition Planning & Developing IEPs	2
EDC 720	Instructional Methods, Strategies, and Technologies to Meet the Needs of All Students	4
EDC 721	Assessment of Students with Disabilities	4
Advanced Level Education Courses		
EDC 723	Teaching Language Arts and Literacy	6
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**77**

[1] Required prior to beginning the last 60 credits of degree program
[2] Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure
- **Basic Academic Skills Assessment (BASA): Pearson Essential Academic Skills or Praxis Core Academic Skills For Educators Exam** required. Passing BASA Exam scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience.
- **Licensure Exams: Pearson Special Education, and Pearson Foundations of Reading**. Passing exam scores are required for state licensure.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
General Education Course		4
	Credits	**16**
Spring		
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
ENG 450	Introduction to Literature	4
PSY 525	Human Development	4
	Credits	**16**
Second Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
ENG 555 or ENG 585	Children's Literature or Short Fiction	4
ENG 615 or ENG 620	Young Adult Literature or Multicultural Perspectives through Literature	4
ENG 675	Survey of Classic Literature Through Film	4
	Credits	**16**
Spring		
COM 590	Professional Communication	4
ENG 505	Introduction to Language and Linguistics	4
ENG 604	Creative Writing	4
ENG 730	The Graphic Novel	4
	Credits	**16**
Summer		
ENG 645	Disability in Literature and Culture	4
	Credits	**4**
Third Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
EDC 500	Foundations of Education	4
EDC 700	Introduction to Clinical Experience	1
EDC 701	Special Education Law	4
	Credits	**13**
Spring		
EDC 703	The Dynamic Role of the Special Educator	4
EDC 717	Positive Behavior Guidance and Student Engagement Clinical A	4
	Credits	**8**

Summer		
EDC 718	Transition Planning & Developing IEPs	2
EDC 721	Assessment of Students with Disabilities	4
	Credits	**6**
Fourth Year		
Fall		
EDC 716	Students with Disabilities	4
EDC 720	Instructional Methods, Strategies, and Technologies to Meet the Needs of All Students [Clinical A]	4
	Credits	**8**
Spring		
EDC 723	Teaching Language Arts and Literacy	6
EDC 798	Culminating Teaching Experience and Seminar [Clinical A]	4
Elective		4
Elective		4
	Credits	**18**
	Total Credits	**121**

Note: Only 1 Clinical course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.
- Apply content knowledge to develop PK-12 students' skills in reading, writing, and critical thinking.
- Identify and explore connections between content areas and teaching methodologies.
- Create learning experiences to foster PK-12 students' independent, collaborative, and creative problem-solving skills.
- Devise strategies to facilitate mastery of course content using technology.

Disclosures

English Language Arts/General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Math Studies / Elementary Education / General Special Education (B.S.)

https://www.unh.edu/program/bachelor-science/math-studies-elementary-education-general-special-education

Description

Individuals who complete this program will be eligible for the New Hampshire Department of Education teacher licensure in Elementary Education (K-6) and General Special Education (ages 5-22).

This program is for qualified participants working or volunteering in approved programs or education settings. The key components of this program include mentorship of the teacher candidates by highly skilled professionals, the hands-on experience of working with children in educational settings, and the opportunity to build your teaching capacity over time. Graduates of this program will be eligible for licensure and highly qualified in middle level mathematics.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A **minimum GPA of 3.0** is required for state licensure.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Math Studies/Elementary Education and General Special Education		
MTH 510	Pre-Calculus	4
MTH 701	Probability and Statistics	4
MTH 702	Mathematical Proof	4
MTH 703	Number Systems	4
MTH 704	Geometric Structures	4
MTH 705	Calculus I	4
MTH 706	History of Mathematics	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
EDC 500	Foundations of Education	4
Introductory Level Education Courses		
EDC 700	Introduction to Clinical Experience	1
EDC 701	Special Education Law	4
EDC 703	The Dynamic Role of the Special Educator	4
EDC 716	Students with Disabilities	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
Intermediate Level Education Courses		
EDC 718	Transition Planning & Developing IEPs	2
EDC 719	Using Technology to Teach Social Studies	4
EDC 721	Assessment of Students with Disabilities	4
EDC 722	Strategies for Teaching Science	4
Advanced Level Education Courses		
EDC 723	Teaching Language Arts and Literacy	6
EDC 724	Elementary School Mathematics Methods	4
or EDC 733	Middle Level Mathematics Methods	
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**77**

1. Required prior to beginning the last 60 credits of degree program
2. Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure.
- **Basic Academic Skills Assessment (BASA): Pearson Essential Academic Skills or Praxis Core Academic Skills For Educators Exam** required. Passing BASA Exam scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience.
- **Licensure Exams: Pearson Foundations of Reading, Pearson Special Education and Pearson General Curriculum Subtests I and II.** Students must attempt to pass exams prior to taking the Culminating Teaching Experience & Seminar. Passing exam scores are required for state licensure.

Candidates who qualify for K-8 licensure must also complete a Middle School Content Exam and 15 content area credits.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4

COM 460	Interpersonal Communication and Group Dynamics	4
General Education Course		4
	Credits	**16**
Spring		
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 510	Pre-Calculus	4
MTH 701	Probability and Statistics	4
	Credits	**16**
Second Year		
Fall		
MTH 702	Mathematical Proof	4
MTH 703	Number Systems	4
General Education Course		4
MTH 704	Geometric Structures	4
EDC 716	Students with Disabilities	4
	Credits	**20**
Spring		
PSY 525	Human Development	4
MTH 705	Calculus I	4
EDC 701	Special Education Law	4
	Credits	**12**
Summer		
EDC 700	Introduction to Clinical Experience	1
EDC 500	Foundations of Education	4
	Credits	**5**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
EDC 703	The Dynamic Role of the Special Educator	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
MTH 706	History of Mathematics	4
	Credits	**20**
Spring		
EDC 719	Using Technology to Teach Social Studies	4
EDC 722	Strategies for Teaching Science	4
	Credits	**8**
Summer		
EDC 718	Transition Planning & Developing IEPs	2
EDC 721	Assessment of Students with Disabilities	4
	Credits	**6**
Fourth Year		
Fall		
EDC 723	Teaching Language Arts and Literacy Clinical A	6
EDC 724	Elementary School Mathematics Methods	4
	Credits	**10**
Spring		
EDC 733	Middle Level Mathematics Methods	4
EDC 798	Culminating Teaching Experience and Seminar Clinical A	4
	Credits	**8**
	Total Credits	**121**

Note: Only 1 Clinical A course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.

Disclosures

Math Studies/Elementary Education and General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Elementary Education (K-6) and General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Math Studies / General Special Education (B.S.)

https://www.unh.edu/program/bachelor-science/math-studies-general-special-education

Description

Individuals who complete this licensure program will be eligible for the New Hampshire Department of Education teacher licensure in General Special Education (ages 5-22).

This program is for qualified participants working or volunteering in approved programs or education settings. The key components of this program include mentorship of the teacher candidates by highly skilled professionals, the hands-on experience of working with children in educational settings, and the opportunity to build your teaching capacity over time.

Graduates of this program will be eligible for licensure in General Special Education (Age 5-22).

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A **minimum GPA of 3.0** is required for state licensure.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Math Studies, General Special Education		
MTH 510	Pre-Calculus	4
MTH 701	Probability and Statistics	4
MTH 702	Mathematical Proof	4
MTH 703	Number Systems	4
MTH 704	Geometric Structures	4
MTH 705	Calculus I	4
MTH 706	History of Mathematics	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
EDC 500	Foundations of Education	4
Introductory Level Education Courses		
EDC 700	Introduction to Clinical Experience	1
EDC 701	Special Education Law	4
EDC 703	The Dynamic Role of the Special Educator	4
EDC 716	Students with Disabilities	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
Intermediate Level Education Courses		
EDC 718	Transition Planning & Developing IEPs	2
EDC 720	Instructional Methods, Strategies, and Technologies to Meet the Needs of All Students	4
EDC 721	Assessment of Students with Disabilities	4
Advanced Level Education Courses		
EDC 723	Teaching Language Arts and Literacy	6
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**69**

1 Required prior to beginning the last 60 credits of degree program
2 Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure
- **Basic Academic Skills Assessment (BASA): Pearson Essential Academic Skills or Praxis Core Academic Skills For Educators Exam** required. Passing BASA Exam scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience.
- **Licensure Exams: Pearson Special Education and Pearson Foundations of Reading** exams required. Students must attempt to pass these exams prior to taking the Culminating Teaching Experience & Seminar. Passing exam scores are required for state licensure.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 510	Pre-Calculus	4
MTH 701	Probability and Statistics	4
	Credits	**16**
Second Year		
Fall		
MTH 702	Mathematical Proof	4
MTH 703	Number Systems	4
MTH 704	Geometric Structures	4
General Education Course		4
EDC 718	Transition Planning & Developing IEPs	2
	Credits	**18**
Spring		
PSY 525	Human Development	4
MTH 705	Calculus I	4
Elective		4
	Credits	**12**
Summer		
EDC 500	Foundations of Education	4
EDC 700	Introduction to Clinical Experience	1
	Credits	**5**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
MTH 706	History of Mathematics	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
	Credits	**16**
Spring		
EDC 721	Assessment of Students with Disabilities	4
EDC 703	The Dynamic Role of the Special Educator	4
Elective		4
	Credits	**12**
Fourth Year		
Fall		
EDC 716	Students with Disabilities	4
EDC 701	Special Education Law	4
EDC 720	Instructional Methods, Strategies, and Technologies to Meet the Needs of All Students [Clinical A]	4
	Credits	**12**
Spring		
EDC 723	Teaching Language Arts and Literacy	6
EDC 798	Culminating Teaching Experience and Seminar [Clinical A]	4
Elective		4
	Credits	**14**
	Total Credits	**121**

Note: Only 1 Clinical A course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.

Disclosures

Math Studies/General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Math Studies, Middle Level (B.S.)

https://www.unh.edu/program/bachelor-science/math-studies-middle-level

Description

Individuals who complete this program will be eligible for the New Hampshire Department of Education teacher licensure in Mathematics (Middle Level).

This program is for qualified participants working or volunteering in approved programs or education settings. The key components of this program include mentorship of the teacher candidates by highly skilled professionals, the hands-on experience of working with children in educational settings, and the opportunity to build your teaching capacity over time. Graduates of this program will be eligible for licensure and highly qualified in mathematics, middle level.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A **minimum GPA of 3.0** is required for state licensure.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Math Studies, Middle Level		
MTH 510	Pre-Calculus	4
MTH 701	Probability and Statistics	4
MTH 702	Mathematical Proof	4
MTH 703	Number Systems	4

MTH 704	Geometric Structures	4
MTH 705	Calculus I	4
MTH 706	History of Mathematics	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
EDC 500	Foundations of Education	4
Introductory Level Education Courses		
EDC 700	Introduction to Clinical Experience	1
EDC 717	Positive Behavior Guidance and Student Engagement	4
EDC 731	Aspects of Mathematics Learning	4
Intermediate Level Education Courses		
EDC 732	Reading and Writing in the Mathematics Content Area	4
Advanced Level Education Courses		
MTH 708	Discrete Mathematics	4
MTH 710	Algebra Theory for Middle School Teachers	4
EDC 733	Middle Level Mathematics Methods	4
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**61**

[1] Required prior to beginning the last 60 credits of degree program
[2] Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure
- **Basic Academic Skills Assessment (BASA): Pearson Essential Academic Skills or Praxis Core Academic Skills For Educators Exam** required. Passing BASA Exam scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience.
- **Licensure Exams- Pearson Middle Grades Mathematics Exam** Required. Students must attempt to pass exam prior to taking the Culminating Teaching Experience & Seminar. Passing exam scores are required for state licensure.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 510	Pre-Calculus	4
MTH 701	Probability and Statistics	4
	Credits	**16**
Second Year		
Summer		
Elective		4
	Credits	**4**
Fall		
PSY 525	Human Development	4
MTH 702	Mathematical Proof	4
MTH 703	Number Systems	4
MTH 704	Geometric Structures	4
	Credits	**16**
Spring		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
MTH 705	Calculus I	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
Elective		4
	Credits	**16**
Third Year		
Summer		
EDC 500	Foundations of Education	4
Elective		4
	Credits	**8**
Fall		
EDC 700	Introduction to Clinical Experience	1
MTH 706	History of Mathematics	4
MTH 708	Discrete Mathematics	4
	Credits	**9**
Spring		
EDC 731	Aspects of Mathematics Learning	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
Elective		4
	Credits	**12**
Fourth Year		
Fall		
MTH 710	Algebra Theory for Middle School Teachers	4
EDC 732	Reading and Writing in the Mathematics Content Area	4
Elective		4
	Credits	**12**

Spring		
EDC 733	Middle Level Mathematics Methods	4
EDC 798	Culminating Teaching Experience and Seminar [Clinical A]	4
Elective		4
	Credits	**12**
	Total Credits	**121**

Note: Only 1 Clinical A course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.

Disclosures

Math Studies/Middle Level (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Mathematics (Middle Level)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Math Studies, Middle Level / General Special Education (B.S.)

https://www.unh.edu/program/bachelor-science/math-studies-middle-level-general-special-education

Description

Individuals who complete this dual licensure program will be eligible for New Hampshire Department of Education teacher licensure in Mathematics (middle level) and General Special Education (ages 5-22).

This is a program for qualified participants working or volunteering in approved programs or education settings. The key components of this program include mentorship of the teacher candidates by highly skilled professionals, the hands-on experience of working with children in educational settings, and the opportunity to build your teaching capacity over time. Graduates of this program will be eligible for licensure in mathematics (middle level) and general special education (ages 5-22).

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	

or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A **minimum GPA of 3.0** is required for state licensure.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Math Studies, Middle Level/General Special Education		
MTH 510	Pre-Calculus	4
MTH 701	Probability and Statistics	4
MTH 702	Mathematical Proof	4
MTH 703	Number Systems	4
MTH 704	Geometric Structures	4
MTH 705	Calculus I	4
MTH 706	History of Mathematics	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
EDC 500	Foundations of Education	4
Introductory Level Education Courses		
EDC 700	Introduction to Clinical Experience	1
EDC 701	Special Education Law	4
EDC 703	The Dynamic Role of the Special Educator	4
EDC 716	Students with Disabilities	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
EDC 731	Aspects of Mathematics Learning	4
Intermediate Level Education Courses		
EDC 720	Instructional Methods, Strategies, and Technologies to Meet the Needs of All Students	4
EDC 718	Transition Planning & Developing IEPs	2
EDC 732	Reading and Writing in the Mathematics Content Area	4
EDC 721	Assessment of Students with Disabilities	4
Advanced Level Education Courses		
MTH 708	Discrete Mathematics	4
MTH 710	Algebra Theory for Middle School Teachers	4
EDC 733	Middle Level Mathematics Methods	4
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**83**

1 Required prior to beginning the last 60 credits of degree program

2 Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure
- **Basic Academic Skills Assessment (BASA): Pearson Essential Academic Skills or Praxis Core Academic Skills For Educators Exam** required. Passing BASA Exam scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience.
- **LIcensure Exams- Pearson Special Education, Pearson Foundations of Reading, and Pearson Middle Level Mathematics exams required.** Students must attempt to pass a exams prior to taking the Culminating Teaching Experience & Seminar. Passing exam scores are required for state licensure.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 510	Pre-Calculus	4
MTH 701	Probability and Statistics	4
	Credits	**16**
Second Year		
Fall		
MTH 702	Mathematical Proof	4
General Education Course		4
MTH 703	Number Systems	4
MTH 704	Geometric Structures	4
	Credits	**16**

Spring		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
PSY 525	Human Development	4
MTH 705	Calculus I	4
	Credits	**12**
Summer		
EDC 500	Foundations of Education	4
EDC 700	Introduction to Clinical Experience	1
	Credits	**5**
Third Year		
Fall		
MTH 706	History of Mathematics Nonclinical	4
EDC 717	Positive Behavior Guidance and Student Engagement Clinical A	4
EDC 731	Aspects of Mathematics Learning	4
MTH 708	Discrete Mathematics	4
	Credits	**16**
Spring		
EDC 732	Reading and Writing in the Mathematics Content Area Clinical A	4
EDC 701	Special Education Law	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
	Credits	**12**
Summer		
EDC 721	Assessment of Students with Disabilities	4
EDC 718	Transition Planning & Developing IEPs	2
	Credits	**6**
Fourth Year		
Fall		
MTH 710	Algebra Theory for Middle School Teachers	4
EDC 703	The Dynamic Role of the Special Educator	4
EDC 716	Students with Disabilities	4
EDC 720	Instructional Methods, Strategies, and Technologies to Meet the Needs of All Students Clinical A	4
	Credits	**16**
Spring		
EDC 733	Middle Level Mathematics Methods	4
EDC 798	Culminating Teaching Experience and Seminar Clinical A	4
	Credits	**8**
	Total Credits	**123**

Note: Only 1 Clinical A course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.

Disclosures

Math Studies/Middle Level and General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Mathematics (Middle Level) and General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Math Studies, Upper Level (B.S.)

https://www.unh.edu/program/bachelor-science/math-studies-upper-level

Description

Individuals who complete this program will be eligible for the New Hampshire Department of Education teacher licensure in Mathematics (upper level).

This program is for qualified participants working or volunteering in approved programs or education settings. The key components of this program include mentorship of the teacher candidates by highly skilled professionals, the hands-on experience of working with children in educational settings, and the opportunity to build your teaching capacity over time. Graduates of this program will be eligible for licensure and highly qualified in mathematics (upper level).

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A **minimum GPA of 3.0** is required for state licensure.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Math Studies, Upper Level		
MTH 510	Pre-Calculus	4
MTH 702	Mathematical Proof	4
MTH 703	Number Systems	4
MTH 704	Geometric Structures	4
MTH 705	Calculus I	4
MTH 706	History of Mathematics	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
EDC 500	Foundations of Education	4
Introductory Level Education Courses		
EDC 700	Introduction to Clinical Experience	1
MTH 701	Probability and Statistics	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
EDC 731	Aspects of Mathematics Learning	4
Intermediate Level Education Courses		
EDC 732	Reading and Writing in the Mathematics Content Area	4
Advanced Level Education Courses		
EDC 734	Upper Level Mathematics Methods	4
MTH 707	Calculus II	4
MTH 708	Discrete Mathematics	4
MTH 709	Topics in Linear and Abstract Algebra	4
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**65**

1 Required prior to beginning the last 60 credits of degree program
2 Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure
- **Basic Academic Skills Assessment (BASA): Pearson Essential Academic Skills or Praxis Core Academic Skills For Educators Exam** required. Passing BASA Exam scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience.

- **Licensure Exam: Pearson Mathematics (Secondary) exam required.** Students must attempt to pass these exams prior to taking the Culminating Teaching Experience & Seminar. Passing exam scores are required for state licensure.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
MTH 402	Math for Our World	4
General Education Course		4
	Credits	**16**
Spring		
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 510	Pre-Calculus	4
MTH 701	Probability and Statistics	4
	Credits	**16**
Second Year		
Fall		
MTH 702	Mathematical Proof [Nonclinical]	4
MTH 703	Number Systems [Nonclinical]	4
MTH 704	Geometric Structures	4
General Education Course		4
	Credits	**16**
Spring		
PSY 525	Human Development	4
MTH 705	Calculus I	4
Elective		4
Elective		4
	Credits	**16**
Third Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
EDC 700	Introduction to Clinical Experience	1
MTH 706	History of Mathematics	4
MTH 707	Calculus II	4
MTH 708	Discrete Mathematics	4
	Credits	**17**
Spring		
EDC 731	Aspects of Mathematics Learning	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
	Credits	**12**
Summer		
EDC 500	Foundations of Education	4
	Credits	**4**
Fourth Year		
Fall		
MTH 709	Topics in Linear and Abstract Algebra	4
EDC 732	Reading and Writing in the Mathematics Content Area	4
Elective		4
	Credits	**12**
Spring		
EDC 734	Upper Level Mathematics Methods	4
EDC 798	Culminating Teaching Experience and Seminar [Clinical A]	4
Elective		4
	Credits	**12**
	Total Credits	**121**

Note: Only 1 Clinical A course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.

Disclosures

Math Studies/Mathematics Upper Level (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

Mathematics (Upper Level)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]

Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Social Studies / Elementary Education / General Special Education (B.S.)

https://www.unh.edu/program/bachelor-science/social-studies-elementary-education-general-special-education

Description

Individuals who complete this dual licensure program will be eligible for the New Hampshire Department of Education teacher licensure in Elementary Education (K-6) and General Special Education (ages 5-22).

This program is for qualified participants working or volunteering in approved programs or education settings. The key components of this program include mentorship of the teacher candidates by highly skilled professionals, the hands-on experience of working with children in educational settings, and the opportunity to build your teaching capacity over time. Graduates of this program will be eligible for licensure in elementary education and general special education. Additionally, graduates of this program will be highly qualified in elementary education.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A **minimum GPA of 3.0** is required for state licensure.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Social Studies, Elementary Education and General Special Education		
ECO 470	Principles of Economics	4
HIS 402	Great Civilizations	4
HIS 410	United States History to 1865	4
HIS 411	United States History: 1865 to the Present	4
HIS 611	Themes in World History	4
POL 450	American Government and Politics	4
SCI 470	Physical Geography	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
EDC 500	Foundations of Education	4

Introductory Level Education Courses

EDC 700	Introduction to Clinical Experience	1
EDC 701	Special Education Law	4
EDC 703	The Dynamic Role of the Special Educator	4
EDC 716	Students with Disabilities	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
Intermediate Level Education Courses		
EDC 718	Transition Planning & Developing IEPs	2
EDC 721	Assessment of Students with Disabilities	4
EDC 719	Using Technology to Teach Social Studies	4
EDC 722	Strategies for Teaching Science	4
Advanced Level Education Courses		
EDC 723	Teaching Language Arts and Literacy	6
EDC 724	Elementary School Mathematics Methods	4
or EDC 733	Middle Level Mathematics Methods	
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**77**

[1] Required prior to beginning the last 60 credits of degree program
[2] Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure.
- **Basic Academic Skills Assessment (BASA): Pearson Essential Academic Skills or Praxis Core Academic Skills For Educators exam** required. Passing BASA exam scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience.
- **Licensure Exams:** Students must attempt to pass licensure exams prior to taking the Culminating Teaching Experience & Seminar. Passing exam scores are required for state licensure.
  - **Pearson Foundations of Reading Exam**
  - **Pearson Special Education Exam**
  - **Pearson General Curriculum Subtests I and II**
  - ***K-8 Licensure: Middle Grades Social Sciences Exam** (plus 15 content area credits)

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
HIS 402	Great Civilizations	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Spring		
HIS 411	United States History: 1865 to the Present	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
POL 450	American Government and Politics	4
	Credits	**16**
Second Year		
Fall		
HIS 410	United States History to 1865	4
HIS 611	Themes in World History	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
Elective		4
	Credits	**16**
Spring		
PSY 525	Human Development	4
ECO 470	Principles of Economics	4
SCI 470	Physical Geography	4
	Credits	**12**
Summer		
EDC 500	Foundations of Education	4
EDC 700	Introduction to Clinical Experience	1
General Education Course		4
	Credits	**9**
Third Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
EDC 701	Special Education Law	4
EDC 703	The Dynamic Role of the Special Educator Clinical A	4
	Credits	**12**
Spring		
EDC 716	Students with Disabilities Nonclinical	4
EDC 717	Positive Behavior Guidance and Student Engagement Clinical A	4
EDC 719	Using Technology to Teach Social Studies Clinical A	4
	Credits	**12**

Summer		
EDC 718	Transition Planning & Developing IEPs	2
EDC 721	Assessment of Students with Disabilities	4
	Credits	**6**
Fourth Year		
Fall		
EDC 723	Teaching Language Arts and Literacy [Clinical A]	6
EDC 724	Elementary School Mathematics Methods	4
	Credits	**10**
Spring		
EDC 722	Strategies for Teaching Science	4
EDC 798	Culminating Teaching Experience and Seminar [Clinical A]	4
Elective		4
	Credits	**12**
	Total Credits	**121**

Note: Only 1 Clinical A course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.
- Analyze current societal trends and issues through the context of events from pre-history to the modern era, inclusive of cultural, political, religious, technological, and scientific changes.
- Employ disciplinary methodologies to describe how the patterns of cultural interaction, interdependence, religion, migration, conflict, and trade affect globalization, nationalism, and environmental changes.
- Attribute how societal development and global interactions are shaped by political structures, ideologies of government, and policies.
- Employ scientific methods to explain the functions and processes of geophysical phenomena and the role humans play in its formation.

Disclosures

Social Studies/Elementary Education and General Special Education (B.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure
Elementary Education (K-6) and General Special Education (ages 5-22)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Social Studies / General Special Education (B.S.)

https://www.unh.edu/program/bachelor-science/social-studies-general-special-education

Description

Individuals who complete this program will be eligible for the New Hampshire Department of Education teacher licensure in General Special Education (ages 5-22).

This program is for qualified participants working or volunteering in approved programs or education settings. The key components of this program include mentorship of the teacher candidates by highly skilled professionals, the hands-on experience of working with children in educational settings, and the opportunity to build your teaching capacity over time. Graduates of this program will be eligible for licensure in General Special Education (ages 5-22).

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A **minimum GPA of 3.0** is required for state licensure.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Social Studies, General Special Education		
ECO 470	Principles of Economics	4
HIS 402	Great Civilizations	4
HIS 410	United States History to 1865	4
HIS 411	United States History: 1865 to the Present	4
HIS 611	Themes in World History	4
POL 450	American Government and Politics	4
SCI 470	Physical Geography	4
Declaration of Candidacy Form Required [1]		
Basic Academic Skills Assessment (BASA) Required [2]		
EDC 500	Foundations of Education	4
Introductory Level Education Courses		
EDC 700	Introduction to Clinical Experience	1
EDC 701	Special Education Law	4
EDC 703	The Dynamic Role of the Special Educator	4
EDC 716	Students with Disabilities	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
Intermediate Level Education Courses		
EDC 720	Instructional Methods, Strategies, and Technologies to Meet the Needs of All Students	4
EDC 718	Transition Planning & Developing IEPs	2
EDC 721	Assessment of Students with Disabilities	4
Advanced Level Education Courses		
EDC 723	Teaching Language Arts and Literacy	6
EDC 798	Culminating Teaching Experience and Seminar	4
Total Credits		**69**

1 Required prior to beginning the last 60 credits of degree program
2 Passing BASA scores must be submitted prior to taking EDC 700 Introduction to Clinical Experience

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

State Licensure Requirements

The following requirements must be completed in order to be recommended to the state for teacher licensure:

- A **minimum GPA of 3.0** is required for state licensure.
- **Basic Academic Skills Assessment (BASA):**
  - **Pearson Essential Academic Skills or Praxis Core Academic Skills For Educators Exam required.** Passing BASA Exam scores must be submitted prior to takingEDC 700 Introduction to Clinical Experience .
- Licensure Exams: Students must attempt to pass licensure exams prior to taking the Culminating Teaching Experience & Seminar. Passing exam scores are required for state licensure.
  - **Pearson Foundations of Reading Exam**
  - **Pearson Special Education Exam**

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
HIS 402	Great Civilizations	4

MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Spring		
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
HIS 411	United States History: 1865 to the Present	4
POL 450	American Government and Politics	4
	Credits	**16**
Second Year		
Fall		
HIS 410	United States History to 1865	4
HIS 611	Themes in World History	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
ECO 470	Principles of Economics	4
PSY 525	Human Development	4
SCI 470	Physical Geography	4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
EDC 700	Introduction to Clinical Experience	1
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
EDC 500	Foundations of Education	4
EDC 701	Special Education Law	4
	Credits	**17**
Spring		
EDC 703	The Dynamic Role of the Special Educator	4
EDC 717	Positive Behavior Guidance and Student Engagement	4
Elective		4
	Credits	**12**
Summer		
EDC 718	Transition Planning & Developing IEPs	2
EDC 721	Assessment of Students with Disabilities	4
	Credits	**6**
Fourth Year		
Fall		
EDC 716	Students with Disabilities	4
EDC 720	Instructional Methods, Strategies, and Technologies to Meet the Needs of All Students Clinical A	4
	Credits	**8**
Spring		
EDC 723	Teaching Language Arts and Literacy	6
EDC 798	Culminating Teaching Experience and Seminar Clinical A	4
Elective		4
	Credits	**14**
	Total Credits	**121**

Note: Only 1 Clinical A course allowed per term

Student Learning Outcomes

Program Learning Outcomes

- Develop a working understanding of current brain research and its implications for teaching and learning.
- Develop the skills to access and utilize technology as a tool to empower teaching and learning.
- Develop a solid understanding of the utilization of formative and summative assessment for program design, monitoring student progress and evaluating teaching effectiveness.
- Work with colleagues to observe, analyze and provide feedback on student progress and teaching effectiveness.
- Utilize research methods and materials, pedagogies and assessment strategies to teach for understanding and application specific to content area.
- Analyze current societal trends and issues through the context of events from pre-history to the modern era, inclusive of cultural, political, religious, technological, and scientific changes.
- Employ disciplinary methodologies to describe how the patterns of cultural interaction, interdependence, religion, migration, conflict, and trade affect globalization, nationalism, and environmental changes.
- Attribute how societal development and global interactions are shaped by political structures, ideologies of government, and policies.
- Employ scientific methods to explain the functions and processes of geophysical phenomena and the role humans play in its formation.

Disclosures

Social Studies (B.S.)/General Special Education (Teacher Licensure)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Teacher Licensure

General Special Education

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]

Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Health Care and Nursing

- Allied Health Leadership Major (B.S.) (p. 568)
- Communication Sciences and Disorders (A.S.) (p. 569)
- Health and Wellness Major (B.S.) (p. 571)
- Health Care Management Major (B.S.) (p. 573)
- Health Care Management Minor (p. 574)
- Nursing Major (B.S.N.) CPSO (p. 575)
- Wellness and Prevention Minor (p. 577)

Allied Health Leadership Major (B.S.)

https://www.unh.edu/program/bachelor-science/allied-health-leadership

Description

The Bachelor of Science in Allied Health Leadership is designed for allied health professionals who seek expanded career options in community health care settings. This program requires an earned associate degree from a regionally accredited college in allied health or the equivalent in professional licensure or advanced training. Courses in this option focus on systems and problem solving in health care, leadership principles and managing teams, advocacy, and navigating health care law, ethics, and policy.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prerequisite: Must have completed an Associate Degree or equivalent in Allied Health.

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Allied Health Leadership		
Foundation Courses		
HLTC 550	The Emerging U.S. Health Care System	4
MTH 504	Statistics	4
Intermediate Courses		
HLTC 612	Population Health	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
LD 600	Becoming an Effective Leader	4
MGMT 566	Organizational Behavior	4
or LD 660	Leadership Theory	
Allied Health Leadership Elective		
Select one of the following:		4
HRM 580	Change Management	
or HRM 635	Managing Conflict	
or MGMT 410	Principles of Management	
or MGMT 608	Fostering Inclusion and Diversity in the Workplace	

or SCI 610	Contemporary Issues in Personal and Global Health	
or SCI 615	Fitness and Health	
Advanced Courses		
HLTC 737	Informatics for Health Professionals	4
HLTC 738	Health Care Policy	4
LD 704	Leading Teams	4
Integrative Capstone		
HLTC 797	Integrative Capstone: Project in Health Care Management	4
Total Credits		**44**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence - For students with conferred associate degree.

First Year		
Fall		**Credits**
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 550	The Emerging U.S. Health Care System	4
LD 600	Becoming an Effective Leader	4
LD 660 or MGMT 566	Leadership Theory or Organizational Behavior	4
	Credits	**16**
Spring		
HLTC 612	Population Health	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
MTH 504	Statistics	4
Select one of the following:		4
HRM 580	Change Management	
HRM 635	Managing Conflict	
MGMT 410	Principles of Management	
MGMT 608	Fostering Inclusion and Diversity in the Workplace	
SCI 610	Contemporary Issues in Personal and Global Health	
SCI 615	Fitness and Health	
	Credits	**16**
Second Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
HLTC 737	Informatics for Health Professionals	4
HLTC 738	Health Care Policy	4
LD 704	Leading Teams	4
	Credits	**16**
Spring		
HLTC 797	Integrative Capstone: Project in Health Care Management	4
Elective		4
Elective		4
	Credits	**12**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Attain proficiency in the concepts, theories, and methods of inquiry pertinent to allied health leadership.
- Develop essential competencies in organizational management, including skills for inter-professional collaboration.
- Integrate knowledge of an allied health care field with the dynamics and complexity of the health care industry.
- Apply ethical principles that guide leadership practice in community care settings.
- Demonstrate strategies to incorporate a variety of cultural frameworks into allied health practice.
- Understand data gathering tools for analysis and decision-making in health care settings.

Communication Sciences and Disorders (A.S.)

https://www.unh.edu/program/associate-science/communication-sciences-disorders

Description

The Associate in Science in Communication Sciences and Disorders offers an intensive course of study in the area of speech and language disorders, including supervised field experience in a variety of settings. Upon completion of the Associate in Science in Communication Sciences and Disorders degree program, the graduate is eligible to apply for certification as a Speech Language Pathology Assistant to the New Hampshire Allied Health Speech Language Pathology Governing Board. The program is designed to meet guidelines of the American Speech-Language-Hearing Association. Speech Language Pathology Assistant courses are also available without the Associate in Science degree for those not seeking certification.

If you reside in another state, please check with the appropriate agency to determine if this program meets requirements in that state.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems: PSY 525		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Concentration coursework.

Code	Title	Credits
Major in Communication Sciences and Disorders		
SLA 500	Role of the Speech-Language Assistant	4
SLA 501	Survey of Communication Disorders	4
SLA 502	Anatomy and Physiology of Speech and Hearing	4
SLA 503	Articulation and Phonological Disorders	4
SLA 504	Introduction to Audiology and Aural Rehabilitation	4
SLA 506	Language Acquisition	4
SLA 550	Clinical Practicum I	2
SLA 555	Clinical Practicum II	6
Total Credits		**32**

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
ENG 420	The Writing Process	4
SLA 500	Role of the Speech-Language Assistant	4
General Education Course		4
	Credits	**16**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
SLA 501	Survey of Communication Disorders	4
SLA 502	Anatomy and Physiology of Speech and Hearing	4
	Credits	**16**
Second Year		
Fall		
SLA 503	Articulation and Phonological Disorders	4
SLA 504	Introduction to Audiology and Aural Rehabilitation	4
SLA 506	Language Acquisition	4
SLA 550	Clinical Practicum I	2
	Credits	**14**
Spring		
SLA 555	Clinical Practicum II	6
COM 480	Visual Communication	4
General Education Course		4
General Education Course		4
	Credits	**18**
	Total Credits	**64**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Gain knowledge, field experience, and core technical skills within the field of speech language pathology assisting.
- Meet professional standards in keeping with state and national guidelines for competency and ethics.

Disclosures

Communication Sciences and Disorders (A.S.)

Location/Delivery: College of Professional Studies [Online Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Speech Language Pathology Assistant
New Hampshire Allied Health Speech Language Pathology Governing Board

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Maine, Massachusetts, New Hampshire, Vermont

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Health and Wellness Major (B.S.)

https://www.unh.edu/program/bachelor-science/health-wellness

Description

The Bachelor of Science in Health and Wellness focuses on preparing students for opportunities to help people lead healthier lifestyles. The curriculum provides foundational principles related to health coaching, health education, and wellness planning to optimize individual and population health. The program can be paired with a variety of minors to further customize skills and prepare for post-graduate work.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Health and Wellness		
Foundation Courses		
HLTC 550	The Emerging U.S. Health Care System	4
PSY 410	Introduction to Psychology	4
SCI 490	Human Biology	4
SCI 502	Nutrition and Health	4
Intermediate Courses		
COM 590	Professional Communication	4
MTH 504	Statistics	4
HLTC 560	Health Behaviors: Theoretical Foundations for Health Education	4
SCI 550	Wellness and the Human Body	4
or SCI 575	Introduction to Lifestyle Medicine	
Health and Wellness Elective		
Select one of the following:		4
HLTC 595	Practicum in Health Care	
SCI 508	Issues in Women's Health	
SCI 575	Introduction to Lifestyle Medicine	
SCI 610	Contemporary Issues in Personal and Global Health	
SCI 615	Fitness and Health	
Advanced Courses		
HLTC 612	Population Health	4
HLTC 720	Health Program Planning and Evaluation	4
SCI 604	Principles of Exercise Science	4
or SCI 615	Fitness and Health	

Integrative Capstone		
HLTC 795	Integrative Capstone: Internship in Health and Wellness	4
or HLTC 798	Integrative Capstone: Project in Health and Wellness	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
HLTC 550	The Emerging U.S. Health Care System	4
SCI 502	Nutrition and Health	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
SCI 490	Human Biology	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
COM 590	Professional Communication	4
PSY 410	Introduction to Psychology	4
Elective		4
	Credits	**16**
Spring		
HLTC 560	Health Behaviors: Theoretical Foundations for Health Education	4
MTH 504	Statistics	4
SCI 550 or SCI 575	Wellness and the Human Body or Introduction to Lifestyle Medicine	4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 612	Population Health	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
SCI 604 or SCI 615	Principles of Exercise Science or Fitness and Health	4
SCI 508 or SCI 575 or SCI 610 or SCI 615 or HLTC 595	Issues in Women's Health or Introduction to Lifestyle Medicine or Contemporary Issues in Personal and Global Health or Fitness and Health or Practicum in Health Care	4
General Education Course		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
HLTC 720	Health Program Planning and Evaluation	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
Elective		4
	Credits	**16**
Spring		
HLTC 798 or HLTC 795	Integrative Capstone: Project in Health and Wellness or Integrative Capstone: Internship in Health and Wellness	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Identify and use evidence-based practice to guide planning and decision-making for individual and population health.
- Communicate in multiple modalities to express wellness and prevention strategies, concepts, and messages.
- Integrate knowledge of cultural frameworks and inter-professional collaboration to improve individual and population health.
- Apply scientific reasoning and evidence-based knowledge to determine health education, health promotion, and disease prevention best practices.
- Develop, implement, and evaluate wellness and prevention interventions.

Health Care Management Major (B.S.)

https://www.unh.edu/program/bachelor-science/health-care-management

Description

The Bachelor of Science degree in Health Care Management integrates the critical functions of management and leadership to facilitate effective health care operations and delivery systems for patients and communities. The program combines health care specific course work with additional relevant areas of leadership, organizational development, and interprofessional collaboration.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Healthcare Management		
Foundation Courses		
HLTC 550	The Emerging U.S. Health Care System	4
HRM 420	Human Resource Management	4
MGMT 566	Organizational Behavior	4
Intermediate Courses		
HLTC 590	Introduction to Fiscal Management in Health Care	4
HLTC 612	Population Health	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
MTH 504	Statistics	4
Advanced Courses		
HLTC 627	Reimbursement and Financing Techniques in Health Care	4
HLTC 737	Informatics for Health Professionals	4
HLTC 738	Health Care Policy	4
Health Care Management Elective		
Select one of the following:		4
HLTC 720	Health Program Planning and Evaluation	
HRM 580	Change Management	
HRM 635	Managing Conflict	
MGMT 608	Fostering Inclusion and Diversity in the Workplace	
SCI 610	Contemporary Issues in Personal and Global Health	
SCI 615	Fitness and Health	
Integrative Capstone		
HLTC 797	Integrative Capstone: Project in Health Care Management	4
Total Credits		**48**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
HLTC 550	The Emerging U.S. Health Care System	4
HRM 420	Human Resource Management	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
MGMT 566	Organizational Behavior	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
HLTC 590	Introduction to Fiscal Management in Health Care	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
HLTC 612	Population Health	4
MTH 504	Statistics	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
HLTC 720 or HRM 580 or HRM 635 or MGMT 608 or SCI 610 or SCI 615	Health Program Planning and Evaluation or Change Management or Managing Conflict or Fostering Inclusion and Diversity in the Workplace or Contemporary Issues in Personal and Global Health or Fitness and Health	4
Elective		4
	Credits	**16**
Spring		
HLTC 627	Reimbursement and Financing Techniques in Health Care	4
HLTC 737	Informatics for Health Professionals	4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
HLTC 738	Health Care Policy	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
Elective		4
	Credits	**16**
Spring		
HLTC 797	Integrative Capstone: Project in Health Care Management	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate knowledge of health care systems and the organization and integration of clinical and community support services that lead to optimal patient care.
- Assess health care financial models and processes to enhance managerial decision making and organizational performance and to strategically support patients and communities.
- Examine the fundamental rights, ethical principles, and overarching policies that guide health care professionals.
- Evaluate the efficacy of employing information technology tools to improve health care delivery and optimize health outcomes.
- Explore how socio-cultural, familial, and individual perspectives influence the operation, delivery, and use of health care systems.
- Demonstrate competency in communication, interpersonal relations, management, and leadership to support organizational effectiveness and inter-professional collaboration.

Health Care Management Minor

https://www.unh.edu/program/minor/health-care-management

Description

This minor explores significant areas of the dynamic and complex health care industry. This minor provides a solid foundation for health care managers and staff, human resource professionals, and others whose work responsibilities intersect with this growing industry.

NOTE: This minor may not be declared with the following majors: BS Health Care Management or BS Allied Health Leadership.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Code	Title	Credits
Required Courses		
HLTC 550	The Emerging U.S. Health Care System	4
HLTC 590	Introduction to Fiscal Management in Health Care	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
HLTC 738	Health Care Policy	4
Select one course from the following:		4
APST 705	Grant Writing	
HLTC 627	Reimbursement and Financing Techniques in Health Care	
HRM 580	Change Management	
HRM 635	Managing Conflict	
MGMT 608	Fostering Inclusion and Diversity in the Workplace	
PSY 646	Psychology of Occupational Stress	
SCI 508	Issues in Women's Health	
SCI 575	Introduction to Lifestyle Medicine	
SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Apply general management or human resource management skills to realistic situations in the field of health care
- Ask critical questions about information and research in the field of health care.

Nursing Major (B.S.N.) CPSO

https://www.unh.edu/program/bachelor-nursing/nursing

Description

RN to BSN

The mission of the RN to BSN program is to prepare registered nurses to meet the dynamic health care needs of diverse populations in New Hampshire and beyond while working in collaborative, inter-professional and evidence-based practice environments. The program is accredited by Commission on Collegiate Nursing Education.

Additional Admissions Criteria for Full Acceptance to the RN to BSN Program

- **License**: An active RN license issued from the state where the student is currently practicing; and
- **Education**: Graduate from a regionally and nationally accredited nursing program.

Conditional Admissions

Those who have not yet fulfilled the additional criteria can begin as a conditionally admitted student. During this time, you can take the following courses:

- Non-NUR courses
- NUR 600 Enhancing Your Nursing Career

Academic Advisor approval is required for course registration to be processed.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Core Curriculum General Education Requirements-Satisfied with Associate Degree

An applicant with a Bachelor's or Master's Degree in another discipline will be required to take only the 30 credits of nursing courses, in addition to meeting the Writing Intensive requirements. MTH 504 Statistics will be required if not satisfied in transfer.

Major Requirements

A minimum grade of C is required in all Major coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only one overlap being utilized between the Major and Minor.

For CRIT 602, SOCI/SOSC Elective, and IDIS 601: Students who do not achieve a C or better may repeat each course one time only.

For all HLTC and NUR courses: Students are allowed to repeat only one of these required courses. Any other course failures may only be repeated with departmental approval. Subsequent failures will result in dismissal from the nursing program.

A minimum GPA of 2.5 in the major is required.

Prerequisite: Conferred Associate Degree in Nursing Required, Registered Nursing License Required

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Nursing		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Foundation Courses		
HLTC 550	The Emerging U.S. Health Care System	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
MTH 504	Statistics	4
NUR 600	Enhancing Your Nursing Career	2
Select one of the following:		4
Any course with SOCI prefix		
Any course with SOSC prefix		
Intermediate Courses		
NUR 615	Evidence-Based Nursing [1]	4
Advanced Courses		
NUR 635	The Nurse as Leader	4
NUR 670	Nursing Care of Populations	4
NUR 700	Nursing Implications of Genetics and Genomics	4
NUR 740	Nursing Care of Vulnerable Populations	4
HLTC 737	Informatics for Health Professionals	4
Integrative Capstone		
NUR 795	Integrative Capstone: Nursing Practicum	4
Total Credits		**54**

[1] Statistics is a prerequisite for NUR 615 Evidence-Based Nursing as well as proof of conferred A.S. Nursing degree or nursing diploma. Academic Advisor approval is required for registration to be processed.

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence - For students with conferred associate degree

First Year		
Fall		**Credits**
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 550	The Emerging U.S. Health Care System	4
MTH 504	Statistics	4
NUR 600	Enhancing Your Nursing Career	2
	Credits	**14**
Spring		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
NUR 615	Evidence-Based Nursing	4
NUR 635	The Nurse as Leader	4
	Credits	**16**
Second Year		
Fall		
HLTC 737	Informatics for Health Professionals	4
NUR 670	Nursing Care of Populations	4
NUR 700	Nursing Implications of Genetics and Genomics	4
NUR 740	Nursing Care of Vulnerable Populations	4
	Credits	**16**
Spring		
NUR 795	Integrative Capstone: Nursing Practicum	4
Select any SOCI or SOSC course		4
Elective (as needed to reach 120 credits)		6
	Credits	**14**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Deliver safe, competent, and compassionate care within frameworks of law and ethics to patients, families, and the diverse groups of a community.
- Be productive citizens characterized by significant contributions to society that are enlightened by knowledge of health care policy and politics and how they affect health care and nursing practice.
- Advocate locally and nationally for social justice and equity in healthcare accessibility and quality.
- Use a variety of technologies to intervene in health-related problems of individuals, families, communities, and within the health care system.

- Identify, evaluate, apply and/or compile evidence from a variety of resources to apply to health-related problems of individuals, families, communities, and the health care system.
- Collaborate as a member and/or leader of teams characterized by effective communication and mutual respect that enhance the quality of health care services and their delivery.

Disclosures

Professional Licensure/Certification Disclosures

This is a non-licensure degree program. No additional license is required to practice in this field.

Visit the Office of the Registrar's website for more information about university programs that lead to professional licensure or certification eligibility.

Wellness and Prevention Minor

https://www.unh.edu/program/minor/wellness-prevention

Description

This minor provides students with key concepts that impact mental and physical well-being. Students will study foundations for health and explore practices to prevent illness and disease. Obstacles and opportunities for health behavior change are addressed.

NOTE: This minor may not be declared with the following majors: BS Health & Wellness, BS Human Services: Wellness and Prevention, or BS Applied Psychology: Wellness & Prevention.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Minor Requirements

Code	Title	Credits
Required Courses		
HLTC 560	Health Behaviors: Theoretical Foundations for Health Education	4
HLTC 720	Health Program Planning and Evaluation	4
SCI 502	Nutrition and Health	4
HLTC 612	Population Health	4
or SCI 550	Wellness and the Human Body	
or SCI 575	Introduction to Lifestyle Medicine	
Select one of the following:		4
HLTC 550	The Emerging U.S. Health Care System	
MTH 504	Statistics	
SCI 604	Principles of Exercise Science	
SCI 610	Contemporary Issues in Personal and Global Health	
SCI 615	Fitness and Health	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Determine the evidence-based best practices that are common to the field of health and wellness.
- Recognize the health-related problems of an individual, a community or agency.
- Apply knowledge of health and wellness concepts to determine interventions that affect behavior change and enhance the overall well-being of an individual or group.

Human Services

- Education Advocacy Minor (p. 577)
- Family Studies Minor (p. 578)
- Human Services Major: Addictions Studies Option (B.S.) (p. 578)
- Human Services Major: Applied Psychology Option (B.S.) (p. 580)
- Human Services Major: Counseling Foundations Option (B.S.) (p. 582)
- Human Services Major: Court Advocacy Option (B.S.) (p. 584)
- Human Services Major: Education Advocacy Option (B.S.) (p. 586)
- Human Services Major: Family Studies Option (B.S.) (p. 588)
- Human Services Major: Wellness and Prevention Option (B.S.) (p. 590)
- Human Services Minor (p. 592)

Education Advocacy Minor

https://www.unh.edu/program/minor/education-advocacy

Description

This minor introduces students to the issues associated with supporting individuals who have specific instructional needs. Students will investigate laws, mechanisms of communication, and specific accommodations associated with education of individuals with needs.

NOTE: This minor may not be declared with the following majors: BS Human Services: Education Advocacy or BS Applied Psychology: Education Advocacy.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
EDC 506		4
or EDC 716	Students with Disabilities	
EDC 601	Positive Behavior Guidance in Early Childhood Education	4
EDC 701	Special Education Law	4
EDC 713	Family and Community Relations in Early Childhood Education	4

SOSC 610	Multicultural Perspectives in Education	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Identify the instructional needs of individuals based on culture, race, ethnicity, or disability.
- Communicate possible accommodations.

Family Studies Minor

https://www.unh.edu/program/minor/family-studies

Description

This minor explores evolving family structures in contemporary American society.

NOTE: This minor may not be declared with the following majors: BS Human Services: Family Studies or BS Applied Psychology: Family Studies.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
PSY 470	Child Development	4
or PSY 480	Infant and Toddler Development	
PSY 630	Psychology of Adulthood	4
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
SOSC 680	Stress and the Family	4
or SOSC 675	Dynamics of Family Relationships	
SOCI 675	Child Abuse and Neglect	4
or PSY 646	Psychology of Occupational Stress	
SOSC 710	Social Stratification and Inequality	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Develop a foundation of knowledge related to evolving and diverse familial structures within the American Society.
- Apply knowledge of relationship dynamics to social, human service, or psychological professional contexts.

Human Services Major: Addictions Studies Option (B.S.)

https://www.unh.edu/program/bachelor-science/human-services-addictions-studies

Description

The Bachelor of Science in Human Services is designed for students with career interests in human services. This program offers graduates the opportunity to provide access to assistance programs, offer support, and improve the quality of life for those in need while working with individuals and the community at both the local and state level. The addictions studies option introduces students to the issues associated with supporting people involved with addictive behaviors.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4

IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Human Services		
Foundation Courses		
HMSV 424	Human Services and the Helping Process	4
HMSV 480	Case Management	4
PSY 410	Introduction to Psychology	4
or SOCI 410	Introduction to Sociology	
Intermediate Courses		
Select two of the following:		8
MGMT 566	Organizational Behavior	
or PSY 525	Human Development	
or SOSC 675	Dynamics of Family Relationships	
HMSV 595	Field-Based Practicum in Human Services	4
or HMSV 597	Project-Based Practicum in Human Services	
Advanced Courses		
HLTC 690	Law and Ethics for Health Care and Human Services	4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
or SOSC 710	Social Stratification and Inequality	
Option in Addictions Studies		
PSY 565	Core Principles of Addiction	4
PSY 675	Foundations of Addictions Counseling	4
PSY 710	The Biology of Addiction	4
SOCI 680	Issues of Addiction in Special Populations	4
Integrative Capstone		
HMSV 795	Integrative Capstone: Internship in Human Services	4
or HMSV 797	Integrative Capstone: Project in Human Services	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
HMSV 424	Human Services and the Helping Process	4
PSY 410 or SOCI 410	Introduction to Psychology or Introduction to Sociology	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
HMSV 480	Case Management	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
PSY 525 or SOSC 675 or MGMT 566	Human Development or Dynamics of Family Relationships or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
HMSV 595 or HMSV 597	Field-Based Practicum in Human Services or Project-Based Practicum in Human Services	4
SOSC 675 or PSY 525 or MGMT 566	Dynamics of Family Relationships or Human Development or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
PSY 565	Core Principles of Addiction	4

PSY 675	Foundations of Addictions Counseling	4
	Credits	**16**
Spring		
SOCI 680	Issues of Addiction in Special Populations	4
PSY 710	The Biology of Addiction	4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
SOSC 710 or MGMT 608	Social Stratification and Inequality or Fostering Inclusion and Diversity in the Workplace	4
Elective		4
Elective		4
	Credits	**16**
Spring		
HMSV 797 or HMSV 795	Integrative Capstone: Project in Human Services or Integrative Capstone: Internship in Human Services	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze the concepts, theories, and methods of inquiry pertinent to human services.
- Apply the concepts, theories, and methods of human services.
- Apply ethical principles that inform and guide practice in human services and relevant subfields.
- Communicate in multiple modalities the needs of a diversity of client populations.

Human Services Major: Applied Psychology Option (B.S.)

https://www.unh.edu/program/bachelor-science/human-services-applied-psychology

Description

The Bachelor of Science in Human Services is designed for students with career interests in human services. This program offers graduates the opportunity to provide access to assistance programs, offer support, and improve the quality of life for those in need while working with individuals and the community at both the local and state level. The applied psychology option introduces students to the research basis of psychology.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		

One Writing Intensive course at the 600-level or above	
One Additional Writing Intensive Course	

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Human Services		
Foundation Courses		
HMSV 424	Human Services and the Helping Process	4
HMSV 480	Case Management	4
PSY 410	Introduction to Psychology	4
or SOCI 410	Introduction to Sociology	
Intermediate Courses		
Select two of the following:		8
MGMT 566	Organizational Behavior	
or PSY 525	Human Development	
or SOSC 675	Dynamics of Family Relationships	
HMSV 595	Field-Based Practicum in Human Services	4
or HMSV 597	Project-Based Practicum in Human Services	
Advanced Courses		
HLTC 690	Law and Ethics for Health Care and Human Services	4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
or SOSC 710	Social Stratification and Inequality	
Option in Applied Psychology		
MTH 504	Statistics	4
IDIS 560	Research Methods in the Behavioral Sciences	4
Select two of the following:		8
PSY 530	Social Psychology	
or PSY 602	Theories of Personality	
or PSY 630	Psychology of Adulthood	
or PSY 685	Principles of Psychopathology	
or PSY 725	Cognitive Psychology	
or PSY 740	Biopsychology	
or SOSC 445	Race & Diversity in the U.S.	
or SOSC 602	Men and Women in Cross-Cultural Perspectives	
Integrative Capstone		
HMSV 795	Integrative Capstone: Internship in Human Services	4
or HMSV 797	Integrative Capstone: Project in Human Services	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
HMSV 424	Human Services and the Helping Process	4
PSY 410 or SOCI 410	Introduction to Psychology or Introduction to Sociology	4
General Education		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
HMSV 480	Case Management	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
PSY 525 or SOSC 675 or MGMT 566	Human Development or Dynamics of Family Relationships or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
HMSV 595 or HMSV 597	Field-Based Practicum in Human Services or Project-Based Practicum in Human Services	4
SOSC 675 or PSY 525 or MGMT 566	Dynamics of Family Relationships or Human Development or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
MTH 504	Statistics	4

PSY 530 or PSY 602 or PSY 630 or PSY 685 or PSY 725 or PSY 740 or SOSC 445 or SOSC 602	Social Psychology or Theories of Personality or Psychology of Adulthood or Principles of Psychopathology or Cognitive Psychology or Biopsychology or Race & Diversity in the U.S. or Men and Women in Cross-Cultural Perspectives	4
	Credits	**16**
Spring		
IDIS 560	Research Methods in the Behavioral Sciences	4
PSY 602 or PSY 530 or PSY 630 or PSY 685 or PSY 725 or PSY 740 or SOSC 445 or SOSC 602	Theories of Personality or Social Psychology or Psychology of Adulthood or Principles of Psychopathology or Cognitive Psychology or Biopsychology or Race & Diversity in the U.S. or Men and Women in Cross-Cultural Perspectives	4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
SOSC 710 or MGMT 608	Social Stratification and Inequality or Fostering Inclusion and Diversity in the Workplace	4
Elective		4
Elective		4
	Credits	**16**
Spring		
HMSV 797 or HMSV 795	Integrative Capstone: Project in Human Services or Integrative Capstone: Internship in Human Services	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze the concepts, theories, and methods of inquiry pertinent to human services.
- Apply the concepts, theories, and methods of human services.
- Apply ethical principles that inform and guide practice in human services and relevant subfields.
- Communicate in multiple modalities the needs of a diversity of client populations.

Human Services Major: Counseling Foundations Option (B.S.)

https://www.unh.edu/program/bachelor-science/human-services-counseling-foundations

Description

The Bachelor of Science in Human Services is designed for students with career interests in human services. This program offers graduates the opportunity to provide access to assistance programs, offer support, and improve the quality of life for those in need while working with individuals and the community at both the local and state level. The counseling foundations option introduces students to the theory and process of delivering counseling services.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4

Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Human Services		
Foundation Courses		
HMSV 424	Human Services and the Helping Process	4
HMSV 480	Case Management	4
PSY 410	Introduction to Psychology	4
or SOCI 410	Introduction to Sociology	
Intermediate Courses		
Select two of the following:		8
MGMT 566	Organizational Behavior	
or PSY 525	Human Development	
or SOSC 675	Dynamics of Family Relationships	
HMSV 595	Field-Based Practicum in Human Services	4
or HMSV 597	Project-Based Practicum in Human Services	
Advanced Courses		
HLTC 690	Law and Ethics for Health Care and Human Services	4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
or SOSC 710	Social Stratification and Inequality	
Option in Counseling Foundations		
PSY 603	Crisis Intervention	4
PSY 654	Counseling Theories	4
PSY 685	Principles of Psychopathology	4
PSY 665	Principles of Assessment	4
or COM 460	Interpersonal Communication and Group Dynamics	
Integrative Capstone		
HMSV 795	Integrative Capstone: Internship in Human Services	4
or HMSV 797	Integrative Capstone: Project in Human Services	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
HMSV 424	Human Services and the Helping Process	4
PSY 410 or SOCI 410	Introduction to Psychology or Introduction to Sociology	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
HMSV 480	Case Management	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
SOSC 675 or PSY 525 or MGMT 566	Dynamics of Family Relationships or Human Development or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
HMSV 595 or HMSV 597	Field-Based Practicum in Human Services or Project-Based Practicum in Human Services	4
PSY 525 or SOSC 675 or MGMT 566	Human Development or Dynamics of Family Relationships or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 690	Law and Ethics for Health Care and Human Services	4

PSY 603	Crisis Intervention	4
PSY 665 or COM 460	Principles of Assessment or Interpersonal Communication and Group Dynamics	4
	Credits	**16**
Spring		
PSY 654	Counseling Theories	4
PSY 685	Principles of Psychopathology	4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
SOSC 710 or MGMT 608	Social Stratification and Inequality or Fostering Inclusion and Diversity in the Workplace	4
Elective		4
Elective		4
	Credits	**16**
Spring		
HMSV 797 or HMSV 795	Integrative Capstone: Project in Human Services or Integrative Capstone: Internship in Human Services	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze the concepts, theories, and methods of inquiry pertinent to human services.
- Apply the concepts, theories, and methods of human services.
- Apply ethical principles that inform and guide practice in human services and relevant subfields.
- Communicate in multiple modalities the needs of a diversity of client populations.

Human Services Major: Court Advocacy Option (B.S.)

https://www.unh.edu/program/bachelor-science/human-services-court-advocacy

Description

The Bachelor of Science in Human Services is designed for students with career interests in human services. This program offers graduates the opportunity to provide access to assistance programs, offer support, and improve the quality of life for those in need while working with individuals and the community at both the local and state level. The court advocacy option introduces students to the issues associated with supporting individuals as they navigate the criminal justice system.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		

One Writing Intensive course at the 600-level or above	
One Additional Writing Intensive Course	

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Human Services		
Foundation Courses		
HMSV 424	Human Services and the Helping Process	4
HMSV 480	Case Management	4
PSY 410	Introduction to Psychology	4
or SOCI 410	Introduction to Sociology	
Intermediate Courses		
Select two of the following:		8
MGMT 566	Organizational Behavior	
or PSY 525	Human Development	
or SOSC 675	Dynamics of Family Relationships	
HMSV 595	Field-Based Practicum in Human Services	4
or HMSV 597	Project-Based Practicum in Human Services	
Advanced Courses		
HLTC 690	Law and Ethics for Health Care and Human Services	4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
or SOSC 710	Social Stratification and Inequality	
Option in Court Advocacy		
CRIM 410	Introduction to Criminology	4
CRIM 555	The Criminal Justice System	4
CRIM 645	Crime Victim Rights and Remedies	4
Select one of the following		4
CRIM 425	Juvenile Justice	
CRIM 707	Constitutional Law	
SOCI 675	Child Abuse and Neglect	
Integrative Capstone		
HMSV 795	Integrative Capstone: Internship in Human Services	4
or HMSV 797	Integrative Capstone: Project in Human Services	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
HMSV 424	Human Services and the Helping Process	4
PSY 410 or SOCI 410	Introduction to Psychology or Introduction to Sociology	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
HMSV 480	Case Management	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
PSY 525 or SOSC 675 or MGMT 566	Human Development or Dynamics of Family Relationships or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
HMSV 595 or HMSV 597	Field-Based Practicum in Human Services or Project-Based Practicum in Human Services	4
SOSC 675 or PSY 525 or MGMT 566	Dynamics of Family Relationships or Human Development or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIM 410	Introduction to Criminology	4
CRIM 555	The Criminal Justice System	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
	Credits	**16**
Spring		
CRIM 425 or CRIM 707 or SOCI 675	Juvenile Justice or Constitutional Law or Child Abuse and Neglect	4
CRIM 645	Crime Victim Rights and Remedies	4
Elective		4
Elective		4
	Credits	**16**

Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
SOSC 710 or MGMT 608	Social Stratification and Inequality or Fostering Inclusion and Diversity in the Workplace	4
Elective		4
Elective		4
	Credits	**16**
Spring		
HMSV 797 or HMSV 795	Integrative Capstone: Project in Human Services or Integrative Capstone: Internship in Human Services	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze the concepts, theories, and methods of inquiry pertinent to human services.
- Apply the concepts, theories, and methods of human services.
- Apply ethical principles that inform and guide practice in human services and relevant subfields.
- Communicate in multiple modalities the needs of a diversity of client populations.

Human Services Major: Education Advocacy Option (B.S.)

https://www.unh.edu/program/bachelor-science/human-services-education-advocacy

Description

The Bachelor of Science in Human Services is designed for students with career interests in human services. This program offers graduates the opportunity to provide access to assistance programs, offer support, and improve the quality of life for those in need while working with individuals and the community at both the local and state level. The education advocacy option introduces students to the issues associated with supporting individuals who have specific instructional needs.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course

sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Human Services		
Foundation Courses		
HMSV 424	Human Services and the Helping Process	4
HMSV 480	Case Management	4
PSY 410	Introduction to Psychology	4
or SOCI 410	Introduction to Sociology	
Intermediate Courses		
Select two of the following:		8
MGMT 566	Organizational Behavior	
or PSY 525	Human Development	
or SOSC 675	Dynamics of Family Relationships	
HMSV 595	Field-Based Practicum in Human Services	4
or HMSV 597	Project-Based Practicum in Human Services	
Advanced Courses		
HLTC 690	Law and Ethics for Health Care and Human Services	4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
or SOSC 710	Social Stratification and Inequality	
Option in Education Advocacy		
EDC 701	Special Education Law	4
EDC 713	Family and Community Relations in Early Childhood Education	4
SOSC 610	Multicultural Perspectives in Education	4
EDC 506		4
or EDC 716	Students with Disabilities	
Integrative Capstone		
HMSV 795	Integrative Capstone: Internship in Human Services	4
or HMSV 797	Integrative Capstone: Project in Human Services	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
ENG 420	The Writing Process	4
HMSV 424	Human Services and the Helping Process	4
PSY 410 or SOCI 410	Introduction to Psychology or Introduction to Sociology	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
HMSV 480	Case Management	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**

Second Year

Fall		
COM 480	Visual Communication	4
PSY 525 or SOSC 675 or MGMT 566	Human Development or Dynamics of Family Relationships or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
HMSV 595 or HMSV 597	Field-Based Practicum in Human Services or Project-Based Practicum in Human Services	4
SOSC 675 or PSY 525 or MGMT 566	Dynamics of Family Relationships or Human Development or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**

Third Year

Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
EDC 506 or EDC 716	 or Students with Disabilities	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
SOSC 610	Multicultural Perspectives in Education	4
	Credits	**16**
Spring		
EDC 701	Special Education Law	4
EDC 713	Family and Community Relations in Early Childhood Education	4
Elective		4
Elective		4
	Credits	**16**

Fourth Year

Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
SOSC 710 or MGMT 608	Social Stratification and Inequality or Fostering Inclusion and Diversity in the Workplace	4
Elective		4
Elective		4
	Credits	**16**

Spring		
HMSV 797 or HMSV 795	Integrative Capstone: Project in Human Services or Integrative Capstone: Internship in Human Services	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze the concepts, theories, and methods of inquiry pertinent to human services.
- Apply the concepts, theories, and methods of human services.
- Apply ethical principles that inform and guide practice in human services and relevant subfields.
- Communicate in multiple modalities the needs of a diversity of client populations.

Human Services Major: Family Studies Option (B.S.)

https://www.unh.edu/program/bachelor-science/human-services-family-studies

Description

The Bachelor of Science in Human Services is designed for students with career interests in human services. This program offers graduates the opportunity to provide access to assistance programs, offer support, and improve the quality of life for those in need while working with individuals and the community at both the local and state level. The family studies option introduces students to the issues associated with providing human services to individuals as well as family groups.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Human Services		
Foundation Courses		
HMSV 424	Human Services and the Helping Process	4
HMSV 480	Case Management	4
PSY 410	Introduction to Psychology	4
or SOCI 410	Introduction to Sociology	
Intermediate Courses		
Select two of the following:		8
MGMT 566	Organizational Behavior	
or PSY 525	Human Development	
or SOSC 675	Dynamics of Family Relationships	
HMSV 595	Field-Based Practicum in Human Services	4

or HMSV 597	Project-Based Practicum in Human Services	
Advanced Courses		
HLTC 690	Law and Ethics for Health Care and Human Services	4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
or SOSC 710	Social Stratification and Inequality	
Option in Family Studies		
PSY 470	Child Development	4
or PSY 480	Infant and Toddler Development	
PSY 630	Psychology of Adulthood	4
or SOSC 630	Aspects of Aging and Older Adulthood in a Modern Society	
SOSC 675	Dynamics of Family Relationships	4
or SOSC 680	Stress and the Family	
SOCI 675	Child Abuse and Neglect	4
or PSY 646	Psychology of Occupational Stress	
Integrative Capstone		
HMSV 795	Integrative Capstone: Internship in Human Services	4
or HMSV 797	Integrative Capstone: Project in Human Services	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
HMSV 424	Human Services and the Helping Process	4
PSY 410 or SOCI 410	Introduction to Psychology or Introduction to Sociology	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
HMSV 480	Case Management	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
PSY 525 or SOSC 675 or MGMT 566	Human Development or Dynamics of Family Relationships or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
HMSV 595 or HMSV 597	Field-Based Practicum in Human Services or Project-Based Practicum in Human Services	4
SOSC 675 or PSY 525 or MGMT 566	Dynamics of Family Relationships or Human Development or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
PSY 630 or SOSC 630	Psychology of Adulthood or Aspects of Aging and Older Adulthood in a Modern Society	4
SOCI 675 or PSY 646	Child Abuse and Neglect or Psychology of Occupational Stress	4
	Credits	**16**
Spring		
PSY 470 or PSY 480	Child Development or Infant and Toddler Development	4
SOSC 680 or SOSC 675	Stress and the Family or Dynamics of Family Relationships	4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
SOSC 710 or MGMT 608	Social Stratification and Inequality or Fostering Inclusion and Diversity in the Workplace	4
Elective		4
Elective		4
	Credits	**16**
Spring		
HMSV 797 or HMSV 795	Integrative Capstone: Project in Human Services or Integrative Capstone: Internship in Human Services	4

Elective	4
Credits	**8**
Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze the concepts, theories, and methods of inquiry pertinent to human services.
- Apply the concepts, theories, and methods of human services.
- Apply ethical principles that inform and guide practice in human services and relevant subfields.
- Communicate in multiple modalities the needs of a diversity of client populations.

Human Services Major: Wellness and Prevention Option (B.S.)

https://www.unh.edu/program/bachelor-science/human-services-wellness-prevention

Description

The Bachelor of Science in Human Services is designed for students with career interests in human services. This program offers graduates the opportunity to provide access to assistance programs, offer support, and improve the quality of life for those in need while working with individuals and the community at both the local and state level. The wellness and prevention option introduces students to the key factors that impact the mental and physical well-being of individuals as well as strategies for prevention and health promotion.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Human Services		
Foundation Courses		
HMSV 424	Human Services and the Helping Process	4
HMSV 480	Case Management	4
PSY 410	Introduction to Psychology	4
or SOCI 410	Introduction to Sociology	
Intermediate Courses		
Select two of the following:		8
MGMT 566	Organizational Behavior	
or PSY 525	Human Development	
or SOSC 675	Dynamics of Family Relationships	
HMSV 595	Field-Based Practicum in Human Services	4
or HMSV 597	Project-Based Practicum in Human Services	
Advanced Courses		
HLTC 690	Law and Ethics for Health Care and Human Services	4

MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
or SOSC 710	Social Stratification and Inequality	
Option in Wellness and Prevention		
HLTC 560	Health Behaviors: Theoretical Foundations for Health Education	4
SCI 502	Nutrition and Health	4
HLTC 612	Population Health	4
Select one of the following:		4
SCI 550	Wellness and the Human Body	
or SCI 575	Introduction to Lifestyle Medicine	
or SCI 604	Principles of Exercise Science	
or SCI 615	Fitness and Health	
Integrative Capstone		
HMSV 795	Integrative Capstone: Internship in Human Services	4
or HMSV 797	Integrative Capstone: Project in Human Services	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Spring		**Credits**
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
HMSV 480	Case Management	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Fall		
ENG 420	The Writing Process	4
HMSV 424	Human Services and the Helping Process	4
PSY 410 or SOCI 410	Introduction to Psychology or Introduction to Sociology	4
General Education Course		4
	Credits	**16**

Second Year

Spring		
HMSV 595 or HMSV 597	Field-Based Practicum in Human Services or Project-Based Practicum in Human Services	4
SOSC 675 or PSY 525 or MGMT 566	Dynamics of Family Relationships or Human Development or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**
Fall		
COM 480	Visual Communication	4
PSY 525 or SOSC 675 or MGMT 566	Human Development or Dynamics of Family Relationships or Organizational Behavior	4
General Education Course		4
Elective		4
	Credits	**16**

Third Year

Spring		
HLTC 612	Population Health	4
SCI 550 or SCI 575 or SCI 604 or SCI 615	Wellness and the Human Body or Introduction to Lifestyle Medicine or Principles of Exercise Science or Fitness and Health	4
Elective		4
Elective		4
	Credits	**16**
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HLTC 560	Health Behaviors: Theoretical Foundations for Health Education	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
SCI 502	Nutrition and Health	4
	Credits	**16**

Fourth Year

Spring		
HMSV 797 or HMSV 795	Integrative Capstone: Project in Human Services or Integrative Capstone: Internship in Human Services	4
Elective		4
	Credits	**8**
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
SOSC 710 or MGMT 608	Social Stratification and Inequality or Fostering Inclusion and Diversity in the Workplace	4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Differentiate and critically analyze the concepts, theories, and methods of inquiry pertinent to human services.
- Apply the concepts, theories, and methods of human services.
- Apply ethical principles that inform and guide practice in human services and relevant subfields.
- Communicate in multiple modalities the needs of a diversity of client populations.

Human Services Minor

https://www.unh.edu/program/minor/human-services

Description

This minor enables a student to examine the organization and delivery of a wide range of human services and professions. Focus areas include ethical practice, intervention approaches, and skill development and theory that students can apply in support roles in a variety of social service and health care agencies.

Note: This minor may not be declared with the following majors: B.S. in Applied Psychology: Human Services or B.S. in Human Services (all options).

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
HMSV 424	Human Services and the Helping Process	4
HLTC 690	Law and Ethics for Health Care and Human Services	4
SOSC 710	Social Stratification and Inequality	4
Select one of the following:		4
COM 460	Interpersonal Communication and Group Dynamics	
HRM 635	Managing Conflict	
PSY 654	Counseling Theories	
Select one of the following:		4
PSY 525	Human Development	
SOSC 675	Dynamics of Family Relationships	
MGMT 566	Organizational Behavior	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Develop knowledge of a diverse array of psychological and social theories, approaches and practices.
- Apply knowledge of human and social behaviors across social and health care professional settings.
- Ask critical questions about information and research in the field of Human Services.

Liberal Arts, Communication, and General Education

Liberal Arts, Communication, and General Education programs include degrees related to the humanities, communication, and individualized studies and is the hub for the college's unique general education program. These programs are built upon a broad-based, flexible, liberal arts core that develops professional and critical thinking skills.

Programs

- Business and Strategic Communication Minor (p. 592)
- Digital Communication Design Major: Digital Marketing Option (B.S.) (p. 593)
- Digital Communication Design Major: Graphic Design Option (B.S.) (p. 595)
- General Studies (A.A.) CPSO (p. 597)
- Graphic Design Minor (p. 598)
- Historical Studies Major (B.A.) (p. 598)
- Historical Studies Minor (p. 601)
- Individualized Studies Major: Behavioral and Social Sciences Option (B.S.) (p. 601)
- Individualized Studies Major: Business and Finance Option (B.S.) (p. 602)
- Individualized Studies Major: Health and Human Services Option (B.S.) (p. 603)
- Individualized Studies Major: Humanities Option (B.A.) (p. 604)
- Individualized Studies Major: Management Option (B.S.) (p. 606)
- Individualized Studies Major: Media and Communication Option (B.S.) (p. 607)
- Individualized Studies Major: Public Safety Option (B.S.) (p. 608)
- Interpersonal and Organizational Communication Minor (p. 609)
- Professional Communication Major: Business and Strategic Communication Option (B.S.) (p. 610)
- Professional Communication Major: Interpersonal and Organizational Communication Option (B.S.) (p. 612)
- Professional Communication Major: Visual Communication and Social Media Option (B.S.) (p. 614)
- Visual Communication and Social Media Minor (p. 616)

Business and Strategic Communication Minor

https://www.unh.edu/program/minor/business-strategic-communication

Description

The minor in Business and Strategic Communication focuses specifically on communication that is external to businesses and organizations. Extensive consideration is given to an organization's image: how to define it, promote it, enhance it, and manage it in times of crisis. However, because a solid external image is predicated upon sound internal structure and communication, the "business communication" component

of this minor encompasses topics such as: managerial communication, presentations, and leadership.

NOTE: This minor may not be declared with the following majors: BS Professional Communication: Business and Strategic Communication.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Code	Title	Credits
Required Courses		
COM 590	Professional Communication	4
COM 710	Managerial Communication	4
COM 765W	Strategic Communication	4
MGMT 566	Organizational Behavior	4
LD 600	Becoming an Effective Leader	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Assess the profound impact of an organization's external image upon its current reputation and future success.
- Analyze strategies by which organizations establish, promote, and maintain their external image.
- Identify strategies by which organizations manage their image in times of crisis, and how they rebuild it in the aftermath.
- Develop knowledge of managerial communication in the areas of leadership, direction, and meetings.

Digital Communication Design Major: Digital Marketing Option (B.S.)

https://www.unh.edu/program/bachelor-science/digital-communication-design-digital-marketing

Description

The Bachelor of Science in Digital Communication Design prepares students for the expanding fields of digital communication and social media as used in business and the public sphere to market products, establish brands, enhance an organization's presence in the public eye, and support the democratization of society. The program integrates technical and creative disciplines through the study of communication modes, media design, marketing fundamentals, and information technology. The B.S. in Digital Communication Design fosters learning that prepares graduates to make a strategic contribution in public and private enterprises that require the ability to convey messages effectively, manage information appropriately, respond to emerging environments, and employ technology strategically in a digital environment.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Digital Communication Design		
Foundational Courses		
ART 401	Introduction to Drawing	4
ART 512	Fundamentals of Design	4
ART 515	Digital Photography	4
Intermediate Courses		
COM 504	Web Development I	4
COM 535	Visual Media Production	4
MKT 510	Principles of Marketing	4
Advanced Courses		
COM 680	Trends in Digital and Social Media	4
COM 743	Synthetic Media and the Construction of Reality	4
MKT 645	Marketing Research	4
Option in Digital Marketing		
MKT 517	Consumer Behavior	4
MKT 615	Digital Storytelling and Brand Management	4
Select three courses from the following:		12
COM 647	Writing for Visual Media	
COM 670	Advanced Visual Communication	
MKT 600	Social Media Marketing	
MKT 612	Agile Marketing	
MKT 720	Digital Advertising	
MKT 723	Marketing Design and Usability	
Integrative Capstone		
COM 798	Integrative Capstone: Project in Digital Communication Design	4
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ART 401	Introduction to Drawing	4
ART 515	Digital Photography	4
ENG 420	The Writing Process	4
General Education Course		4
	Credits	**16**
Spring		
ART 512	Fundamentals of Design	4
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
COM 504	Web Development I	4
MKT 510	Principles of Marketing	4
Elective		4
	Credits	**16**
Spring		
COM 535	Visual Media Production	4
COM 545	Digital Illustration	4
COM 645	Advanced Digital Illustration	4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
MKT 517	Consumer Behavior	4
MKT 615	Digital Storytelling and Brand Management	4
Elective		4
	Credits	**16**
Spring		
COM 680	Trends in Digital and Social Media	4
MKT 645	Marketing Research	4
COM 647 or COM 670 or MKT 600 or MKT 612 or MKT 720 or MKT 723	Writing for Visual Media or Advanced Visual Communication or Social Media Marketing or Agile Marketing or Digital Advertising or Marketing Design and Usability	4
General Education Course		4
Elective		4
	Credits	**20**
Fourth Year		
Fall		
COM 743	Synthetic Media and the Construction of Reality	4

COM 670 or MKT 600 or MKT 612 or MKT 645 or MKT 720 or MKT 723	Advanced Visual Communication or Social Media Marketing or Agile Marketing or Marketing Research or Digital Advertising or Marketing Design and Usability	
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
	Credits	**12**
Spring		
COM 798	Integrative Capstone: Project in Digital Communication Design	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Express ideas and concepts through the development of digital content.
- Employ industry-standard information design, usability, and accessibility principles throughout the digital communication design process.
- Use optimal composition applications and technologies for specific media and design objectives.
- Develop various process models for digital content creation that reflect project aims, resources, constraints, and other variables.
- Develop methods of communication and content development for individuals, groups, and mass media informed by theories of communication and global culture.
- Develop digital content according to codes of ethics, privacy, conflict, and citizenship.

Digital Communication Design Major: Graphic Design Option (B.S.)

https://www.unh.edu/program/bachelor-science/digital-communication-design-graphic-design-option

Description

The Bachelor of Science in Digital Communication Design prepares students for the expanding fields of digital communication and social media as used in business and the public sphere to market products, establish brands, enhance an organization's presence in the public eye, and support the democratization of society. The program integrates technical and creative disciplines through study of communication modes, media design, marketing fundamentals, and information technology. The B.S. in Digital Communication Design fosters learning that prepares graduates to make a strategic contribution in public and private enterprises that require the ability to convey messages effectively, manage information appropriately, respond to emerging environments, and employ technology strategically in a digital environment.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		

One Writing Intensive course at the 600-level or above	
One Additional Writing Intensive Course	

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Digital Communication Design		
Foundational Courses		
ART 401	Introduction to Drawing	4
ART 512	Fundamentals of Design	4
ART 515	Digital Photography	4
Intermediate Courses		
COM 504	Web Development I	4
COM 535	Visual Media Production	4
MKT 510	Principles of Marketing	4
Advanced Courses		
COM 680	Trends in Digital and Social Media	4
COM 743	Synthetic Media and the Construction of Reality	4
MKT 645	Marketing Research	4
or MKT 517	Consumer Behavior	
Option in Graphic Design		
COM 545	Digital Illustration	4
COM 645	Advanced Digital Illustration	4
MKT 600	Social Media Marketing	4
Select two from the following:		8
CMPL 622	Human Computer Interaction	
or COM 665	Media and Strategic Communication	
or COM 670	Advanced Visual Communication	
or COM 685	Web Development II	
or CMPL 665	Web Application Development	
or DAT 510	Introduction to Data Analytics	
or MKT 720	Digital Advertising	
Integrative Capstone		
COM 798	Integrative Capstone: Project in Digital Communication Design	4
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ART 401	Introduction to Drawing	4
ART 515	Digital Photography	4
ENG 420	The Writing Process	4
General Education Course		4
	Credits	**16**
Spring		
ART 512	Fundamentals of Design	4
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
COM 504	Web Development I	4
MKT 510	Principles of Marketing	4
Elective		4
	Credits	**16**
Spring		
COM 535	Visual Media Production	4
COM 545	Digital Illustration	4
COM 645	Advanced Digital Illustration	4
General Education Course		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
MKT 600	Social Media Marketing	4
MKT 517 or MKT 645	Consumer Behavior or Marketing Research	4
Elective		4
	Credits	**16**
Spring		
COM 680	Trends in Digital and Social Media	4
COM 665 or COM 670 or COM 685 or CMPL 622 or CMPL 665 or DAT 510 or MKT 720	Media and Strategic Communication or Advanced Visual Communication or Web Development II or Human Computer Interaction or Web Application Development or Introduction to Data Analytics or Digital Advertising	4
General Education Course		4
Elective		4
	Credits	**16**

Fourth Year		
Fall		
COM 743	Synthetic Media and the Construction of Reality	4
CMPL 622 or COM 665 or COM 670 or COM 685 or CMPL 665 or DAT 510 or MKT 720	Human Computer Interaction or Media and Strategic Communication or Advanced Visual Communication or Web Development II or Web Application Development or Introduction to Data Analytics or Digital Advertising	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
	Credits	**16**
Spring		
COM 798	Integrative Capstone: Project in Digital Communication Design	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Express ideas and concepts through the development of digital content.
- Employ industry-standard information design, usability, and accessibility principles throughout the digital communication design process.
- Use optimal composition applications and technologies for specific media and design objectives.
- Develop various process models for digital content creation that reflect project aims, resources, constraints, and other variables.
- Develop methods of communication and content development for individuals, groups, and mass media informed by theories of communication and global culture.
- Develop digital content according to codes of ethics, privacy, conflict, and citizenship.

General Studies (A.A.) CPSO

https://www.unh.edu/program/associate-arts/general-studies

Description

The Associate Degree in General Studies offers a flexible pathway for students with diverse educational backgrounds or schedules. This program allows students to build on prior learning, explore a variety of disciplines, and create a general studies degree that aligns with their personal and career goals. Designed for students who want to explore their academic and professional interests before choosing a specific career path, the program emphasizes critical thinking, communication, and problem-solving skills essential for success in a wide range of fields.

Requirements

Degree Requirements

Minimum Credit Requirement: 60 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: General Education Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of one course overlap between the Major and General Education areas.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
Total Credits		**32**

Major Requirements

A minimum grade of C- is required in all Major and Concentration coursework.

Code	Title	Credits
Major in General Studies		
IDIS 410	College Success Seminar	2
General Studies Concentration		20
Total Credits		**22**

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
IDIS 410	College Success Seminar	2
ENG 420	The Writing Process	4

COM 460	Interpersonal Communication and Group Dynamics	4
Elective		2
	Credits	**12**
Spring		
CRIT 501	Introduction to Critical Inquiry	4
Select 1 of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
General Education Course		4
General Studies Option Course		4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
General Education Course		4
General Studies Option Course		4
General Studies Option Course		4
	Credits	**16**
Spring		
General Studies Option Course		4
General Studies Option Course		4
General Education Course		4
Elective		4
	Credits	**16**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Organize, draft, edit, and revise writing in order to communicate effectively.
- Engage in verbal and/or online interactions with others and use communication skills to influence others.
- Apply quantitative reasoning to real-world problems.
- Think critically to analyze information and craft informed arguments.
- Articulate the key concepts, methodologies, and applications of a concentrated area of academic and/or professional interest.
- Use key elements of career exploration to develop an integrated career and academic plan.
- Practice ways of thinking in and across areas of knowledge.

Graphic Design Minor

https://www.unh.edu/program/minor/graphic-design

Description

The minor in Graphic Design enables students to develop and enhance creative and critical thinking in the field of graphic design. Students apply technical skills to transform ideas into a variety of media and utilize visual communication to meet specific needs. The Graphic Design minor complements a variety of disciplines, as it pairs well with professional communication, marketing, and digital media.

NOTE: This minor may not be declared with the following major: BS Digital Communication Design: Graphic Design.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
ART 401	Introduction to Drawing	4
or ART 515	Digital Photography	
ART 512	Fundamentals of Design	4
COM 545	Digital Illustration	4
COM 665	Media and Strategic Communication	4
COM 645	Advanced Digital Illustration	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Visualize appropriate concepts for projects targeted toward a specific purpose and audience.
- Plan and research successful design solutions that meet established needs and deadlines.
- Create, present, and clearly communicate the purpose and rationale for completed design projects.
- Apply learned digital software skill to solve visual design problems.
- Evaluate and constructively critique projects throughout the design process.

Historical Studies Major (B.A.)

https://www.unh.edu/program/bachelor-arts/historical-studies

Description

The Bachelor of Arts degree in Historical Studies hones the skills of critical thinking, analytical reading, effective writing, and information synthesis. The B.A. in Historical Studies provides a sound foundation for a variety of careers and generalizes well to a range of industries. The degree also provides the necessary background for further study for those seeking a graduate degree in history or historic preservation, or in a closely related field such as law or political science.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral

Core Curriculum Required: General Education Program

Writing Program Requirements

Foreign Language Requirement*

Major, Option and Elective Requirements as indicated.

GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Historical Studies		
Foundational Courses		
HIS 402	Great Civilizations	4
HIS 410	United States History to 1865	4
HIS 411	United States History: 1865 to the Present	4
HIS 512	European History: Renaissance through the Industrial Revolution	4
Select one of the following:		4
ART 550	Art History: Western World	
or HUMN 502	American Popular Culture	
or POL 450	American Government and Politics	
or POL 554	Law and Society	
Intermediate Courses		
HIS 590	Historical Methods	4
Select one of the following:		4
COM 590	Professional Communication	
or COM 665	Media and Strategic Communication	
or ENG 590	Expository Writing	
Advanced Courses		
HIS 611	Themes in World History	4
Select three of the following:		12
CRIM 707	Constitutional Law	
or HIS 602	History of New England	
or HIS 718	History of World War II	
or HIS 727	Vietnam War: An Historical Perspective	
or POL 690	The US in World Affairs	
Integrative Capstone		
HIS 795	Integrative Capstone: Internship in History	4
or HIS 797	Integrative: Project in History	
Total Credits		**48**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

* The Bachelor of Arts degree requires proficiency in a foreign language. This requirement may be fulfilled by completing the equivalent of a full-year elementary-level course in a language not previously studied, or by completing the equivalent of a semester of a course in a foreign language at the intermediate or higher level, or by earning credit through an approved Advanced Placement or College Board foreign language achievement test (minimum scores vary). The proficiency in a foreign language requirement must be satisfied by the end of the sophomore year. No credit is awarded for elementary year college coursework if the student has had two or more years of that language in high school. It is strongly advised that students check with academic departments to identify department-advised specific foreign language proficiency options.
  Note: A student with a documented disability who wishes accommodation on the basis that the disability will prevent them from

successfully mastering a foreign language requirement, or whose foreign language requirement was waived in high school because of a documented disability, must contact Student Accessibility Services, Smith Hall, (603) 862-2607 (Voice/TDD).

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
ENG 420	The Writing Process	4
HIS 410	United States History to 1865	4
HIS 411	United States History: 1865 to the Present	4
General Education or Foreign Language		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
HIS 402	Great Civilizations	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
ART 550 or HUMN 502 or POL 450 or POL 554	Art History: Western World or American Popular Culture or American Government and Politics or Law and Society	4
General Education or Foreign Language		4
Elective		4
	Credits	**16**
Spring		
HIS 512	European History: Renaissance through the Industrial Revolution	4
HIS 590	Historical Methods	4
General Education or Foreign Language		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
HIS 611	Themes in World History	4
CRIM 707 or HIS 602 or HIS 718 or HIS 727 or POL 690	Constitutional Law or History of New England or History of World War II or Vietnam War: An Historical Perspective or The US in World Affairs	4
General Education or Language Requirement		4
	Credits	**16**
Spring		
COM 665 or COM 590 or ENG 590	Media and Strategic Communication or Professional Communication or Expository Writing	4
HIS 602 or HIS 718 or HIS 727 or CRIM 707 or POL 690	History of New England or History of World War II or Vietnam War: An Historical Perspective or Constitutional Law or The US in World Affairs	4
General Education or Foreign Language		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
HIS 718 or HIS 602 or HIS 727 or CRIM 707 or POL 690	History of World War II or History of New England or Vietnam War: An Historical Perspective or Constitutional Law or The US in World Affairs	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
	Credits	**12**
Spring		
HIS 797 or HIS 795	Integrative: Project in History or Integrative Capstone: Internship in History	4
Elective		4
Elective		4
	Credits	**12**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Appraise and contextualize information in order to convey both the particularity of past lives and the scale of human experience.
- Evaluate the multiple causes of complex events and phenomena using a multitude of sources and perspectives.
- Analyze U.S. history from the period of native peoples through the present.
- Explore world history, emphasizing major trends that influenced multiple nations and regions.

- Investigate the contributions and experiences of diverse peoples to national and world events.
- Craft well-supported historical narratives, arguments, and reports of research findings in a variety of media using discipline-specific writing and citation conventions.

Historical Studies Minor

https://www.unh.edu/program/minor/historical-studies

Description

The minor in historical studies is designed to provide an overview of world history, including the study of U.S. history in greater depth. The courses provide students with a foundation in historical research, evaluation of sources, the diversity of human experience, and the opportunity to explore modern society from the context of the past.

NOTE: This minor may not be declared with the following major: BA Historical Studies.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
HIS 590	Historical Methods	4
HIS 611	Themes in World History	4
Select two of the following:		8
HIS 402	Great Civilizations	
HIS 410	United States History to 1865	
HIS 411	United States History: 1865 to the Present	
HIS 512	European History: Renaissance through the Industrial Revolution	
POL 450	American Government and Politics	
Select one of the following:		4
HIS 602	History of New England	
HIS 718	History of World War II	
HIS 727	Vietnam War: An Historical Perspective	
POL 690	The US in World Affairs	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Demonstrate a breadth of knowledge in world history.
- Articulate key patterns of social, cultural, and political change.
- Accurately apply all of the techniques in historical methods, source evaluation, and written analysis.
- Appraise and contextualize information in order to convey both the particularity of past lives and the scale of human experience.
- Craft well-supported historical research using discipline-specific writing and citation conventions.

Individualized Studies Major: Behavioral and Social Sciences Option (B.S.)

https://www.unh.edu/program/bachelor-science/individualized-studies-behavioral-social-sciences

Description

The Bachelor of Science (B.S.) in Individualized Studies provides an opportunity for interdisciplinary or specialized study in the following focus areas: Behavioral & Social Sciences, Business & Finance, Health & Human Services, Management, Media & Communication, and Public Safety.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4

IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Major Requirements: A minimum of 40 semester credit hours is required in the major with at least sixteen credits at the upper level taken at the University of New Hampshire.

The IS degree provides a path for students who wish to build a major that combines various courses into a distinct area of study. The IS major must be distinct from any existing program offered at CPSO. Courses in the major must provide breadth and depth of study and form a cohesive program. Students will work closely with advisors and program directors to ensure their major has both academic rigor and alignment with their career and educational goals. Prospective Individualized Studies students must submit a proposal after consulting with their advisor and program director and will need to be approved by the appropriate subject matter faculty and director.

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

The **Individualized Studies (IS) Degree** is designed for self-directed students who seek to pursue a unique course of study not available through existing degree programs at UNH-CPSO. This flexible and customizable major allows students to tailor their academic journey to focus on a specific issue or topic in-depth, rather than following a traditional program.

Student Learning Outcomes

Program Learning Outcomes

- Synthesize personal, professional, and scholarly interests into a coherent individualized program of study composed of a full range of foundational knowledge through upper-level professional practice and scholarly inquiry.
- Use research and analytical methods to substantiate proficiency in the knowledge and skills of a coherent area of study.
- Analyze complex problems and deliver evidence-based solutions using a domain-specific or interdisciplinary approach.
- Evaluate academic progression according to programmatic standards for academic performance and disciplinary expertise.

Individualized Studies Major: Business and Finance Option (B.S.)

https://www.unh.edu/program/bachelor-science/individualized-studies-business-finance

Description

The Bachelor of Science (B.S.) in Individualized Studies provides an opportunity for interdisciplinary or specialized study in the following focus areas: Behavioral & Social Sciences, Business & Finance, Health & Human Services, Management, Media & Communication, and Public Safety.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A minimum of 40 semester credit hours is required in the major with at least sixteen credits at the upper level taken at the University of New Hampshire.

The IS degree provides a path for students who wish to build a major that combines various courses into a distinct area of study. The IS major must be distinct from any existing program offered at CPSO. Courses in the major must provide breadth and depth of study and form a cohesive program. Students will work closely with advisors and program directors to ensure their major has both academic rigor and alignment with their career and educational goals. Prospective Individualized Studies students must submit a proposal after consulting with their advisor and program director and will need to be approved by the appropriate subject matter faculty and director.

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

The **Individualized Studies (IS) Degree** is designed for self-directed students who seek to pursue a unique course of study not available through existing degree programs at UNH-CPSO. This flexible and customizable major allows students to tailor their academic journey to focus on a specific issue or topic in-depth, rather than following a traditional program.

Student Learning Outcomes

Program Learning Outcomes

- Synthesize personal, professional, and scholarly interests into a coherent individualized program of study composed of a full range of foundational knowledge through upper-level professional practice and scholarly inquiry.
- Use research and analytical methods to substantiate proficiency in the knowledge and skills of a coherent area of study.
- Analyze complex problems and deliver evidence-based solutions using a domain-specific or interdisciplinary approach.
- Evaluate academic progression according to programmatic standards for academic performance and disciplinary expertise.

Individualized Studies Major: Health and Human Services Option (B.S.)

https://www.unh.edu/program/bachelor-science/individualized-studies-health-human-services

Description

The Bachelor of Science (B.S.) in Individualized Studies provides an opportunity for interdisciplinary or specialized study in the following focus areas: Behavioral & Social Sciences, Business & Finance, Health & Human Services, Management, Media & Communication, and Public Safety.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as

noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A minimum of 40 semester credit hours is required in the major with at least sixteen credits at the upper level taken at the University of New Hampshire.

The IS degree provides a path for students who wish to build a major that combines various courses into a distinct area of study. The IS major must be distinct from any existing program offered at CPSO. Courses in the major must provide breadth and depth of study and form a cohesive program. Students will work closely with advisors and program directors to ensure their major has both academic rigor and alignment with their career and educational goals. Prospective Individualized Studies students must submit a proposal after consulting with their advisor and program director and will need to be approved by the appropriate subject matter faculty and director.

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

The **Individualized Studies (IS) Degree** is designed for self-directed students who seek to pursue a unique course of study not available through existing degree programs at UNH-CPSO. This flexible and customizable major allows students to tailor their academic journey to focus on a specific issue or topic in-depth, rather than following a traditional program.

Student Learning Outcomes

Program Learning Outcomes

- Synthesize personal, professional, and scholarly interests into a coherent individualized program of study composed of a full range of foundational knowledge through upper-level professional practice and scholarly inquiry.
- Use research and analytical methods to substantiate proficiency in the knowledge and skills of a coherent area of study.
- Analyze complex problems and deliver evidence-based solutions using a domain-specific or interdisciplinary approach.
- Evaluate academic progression according to programmatic standards for academic performance and disciplinary expertise.

Individualized Studies Major: Humanities Option (B.A.)

https://www.unh.edu/program/bachelor-arts/individualized-studies-humanities

Description

The Bachelor of Arts (B.A.) in Individualized Studies degree provides students with an opportunity for interdisciplinary study in Humanities. Specialized study in English or History is also an option for this degree.

The Individualized Studies major also affords students who have transfer courses in the humanities or other sources of prior college-level learning an opportunity to create a unified and coherent program from prior educational experiences.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral

Core Curriculum Required: General Education Program

Writing Program Requirements

Foreign Language Requirement*

Major, Option and Elective Requirements as indicated.

GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A minimum of 40 semester credit hours is required in the major with at least sixteen credits at the upper level taken at the University of New Hampshire.

The IS degree provides a path for students who wish to build a major that combines various courses into a distinct area of study. The IS major must be distinct from any existing program offered at CPSO. Courses in the major must provide breadth and depth of study and form a cohesive program. Students will work closely with advisors and program directors to ensure their major has both academic rigor and alignment with their career and educational goals. Prospective Individualized Studies students must submit a proposal after consulting with their advisor and program director and will need to be approved by the appropriate subject matter faculty and director.

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

* The Bachelor of Arts degree requires proficiency in a foreign language. This requirement may be fulfilled by completing the equivalent of a full-year elementary-level course in a language not previously studied, or by completing the equivalent of a semester of a course in a foreign language at the intermediate or higher level, or by earning credit through an approved Advanced Placement or College Board foreign language achievement test (minimum scores vary). The proficiency in a foreign language requirement must be satisfied by the end of the sophomore year. No credit is awarded for elementary year college coursework if the student has had two or more years of that language in high school. It is strongly advised that students check with academic departments to identify department-advised specific foreign language proficiency options.
  Note: A student with a documented disability who wishes accommodation on the basis that the disability will prevent them from successfully mastering a foreign language requirement, or whose foreign language requirement was waived in high school because of a documented disability, must contact Student Accessibility Services, Smith Hall, (603) 862-2607 (Voice/TDD).

Degree Plan

The **Individualized Studies (IS) Degree** is designed for self-directed students who seek to pursue a unique course of study not available through existing degree programs at UNH-CPSO. This flexible and customizable major allows students to tailor their academic journey to focus on a specific issue or topic in-depth, rather than following a traditional program.

Student Learning Outcomes

Program Learning Outcomes

- Synthesize personal, professional, and scholarly interests into a coherent individualized program of study composed of a full range of foundational knowledge through upper-level professional practice and scholarly inquiry.
- Use research and analytical methods to substantiate proficiency in the knowledge and skills of a coherent area of study.
- Analyze complex problems and deliver evidence-based solutions using a domain-specific or interdisciplinary approach.
- Evaluate academic progression according to programmatic standards for academic performance and disciplinary expertise.

Individualized Studies Major: Management Option (B.S.)

https://www.unh.edu/program/bachelor-science/individualized-studies-management

Description

The Bachelor of Science (B.S.) in Individualized Studies provides an opportunity for interdisciplinary or specialized study in the following focus areas: Behavioral & Social Sciences, Business & Finance, Health & Human Services, Management, Media & Communication, and Public Safety.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A minimum of 40 semester credit hours is required in the major with at least sixteen credits at the upper level taken at the University of New Hampshire.

The IS degree provides a path for students who wish to build a major that combines various courses into a distinct area of study. The IS major must be distinct from any existing program offered at CPSO. Courses in the major must provide breadth and depth of study and form a cohesive program. Students will work closely with advisors and program directors to ensure their major has both academic rigor and alignment with their career and educational goals. Prospective Individualized Studies students must submit a proposal after consulting with their advisor and program director and will need to be approved by the appropriate subject matter faculty and director.

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be

completed with their capstone. Academic Advisor approval is required for registration to be processed.

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

The **Individualized Studies (IS) Degree** is designed for self-directed students who seek to pursue a unique course of study not available through existing degree programs at UNH-CPSO. This flexible and customizable major allows students to tailor their academic journey to focus on a specific issue or topic in-depth, rather than following a traditional program.

Student Learning Outcomes

Program Learning Outcomes

- Synthesize personal, professional, and scholarly interests into a coherent individualized program of study composed of a full range of foundational knowledge through upper-level professional practice and scholarly inquiry.
- Use research and analytical methods to substantiate proficiency in the knowledge and skills of a coherent area of study.
- Analyze complex problems and deliver evidence-based solutions using a domain-specific or interdisciplinary approach.
- Evaluate academic progression according to programmatic standards for academic performance and disciplinary expertise.

Individualized Studies Major: Media and Communication Option (B.S.)

https://www.unh.edu/program/bachelor-science/individualized-studies-media-communication

Description

The Bachelor of Science (B.S.) in Individualized Studies provides an opportunity for interdisciplinary or specialized study in the following focus areas: Behavioral & Social Sciences, Business & Finance, Health & Human Services, Management, Media & Communication, and Public Safety.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A minimum of 40 semester credit hours is required in the major with at least sixteen credits at the upper level taken at the University of New Hampshire.

The IS degree provides a path for students who wish to build a major that combines various courses into a distinct area of study. The IS major

must be distinct from any existing program offered at CPSO. Courses in the major must provide breadth and depth of study and form a cohesive program. Students will work closely with advisors and program directors to ensure their major has both academic rigor and alignment with their career and educational goals. Prospective Individualized Studies students must submit a proposal after consulting with their advisor and program director and will need to be approved by the appropriate subject matter faculty and director.

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

The **Individualized Studies (IS) Degree** is designed for self-directed students who seek to pursue a unique course of study not available through existing degree programs at UNH-CPSO. This flexible and customizable major allows students to tailor their academic journey to focus on a specific issue or topic in-depth, rather than following a traditional program.

Student Learning Outcomes

Program Learning Outcomes

- Synthesize personal, professional, and scholarly interests into a coherent individualized program of study composed of a full range of foundational knowledge through upper-level professional practice and scholarly inquiry.
- Use research and analytical methods to substantiate proficiency in the knowledge and skills of a coherent area of study.
- Analyze complex problems and deliver evidence-based solutions using a domain-specific or interdisciplinary approach.
- Evaluate academic progression according to programmatic standards for academic performance and disciplinary expertise.

Individualized Studies Major: Public Safety Option (B.S.)

https://www.unh.edu/program/bachelor-science/individualized-studies-public-safety

Description

The Bachelor of Science (B.S.) in Individualized Studies provides an opportunity for interdisciplinary or specialized study in the following focus areas: Behavioral & Social Sciences, Business & Finance, Health & Human Services, Management, Media & Communication, and Public Safety.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		

One Writing Intensive course at the 600-level or above	
One Additional Writing Intensive Course	

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

A minimum of 40 semester credit hours is required in the major with at least sixteen credits at the upper level taken at the University of New Hampshire.

The IS degree provides a path for students who wish to build a major that combines various courses into a distinct area of study. The IS major must be distinct from any existing program offered at CPSO. Courses in the major must provide breadth and depth of study and form a cohesive program. Students will work closely with advisors and program directors to ensure their major has both academic rigor and alignment with their career and educational goals. Prospective Individualized Studies students must submit a proposal after consulting with their advisor and program director and will need to be approved by the appropriate subject matter faculty and director.

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

The **Individualized Studies (IS) Degree** is designed for self-directed students who seek to pursue a unique course of study not available through existing degree programs at UNH-CPSO. This flexible and customizable major allows students to tailor their academic journey to focus on a specific issue or topic in-depth, rather than following a traditional program.

Student Learning Outcomes

Program Learning Outcomes

- Synthesize personal, professional, and scholarly interests into a coherent individualized program of study composed of a full range of foundational knowledge through upper-level professional practice and scholarly inquiry.
- Use research and analytical methods to substantiate proficiency in the knowledge and skills of a coherent area of study.
- Analyze complex problems and deliver evidence-based solutions using a domain-specific or interdisciplinary approach.
- Evaluate academic progression according to programmatic standards for academic performance and disciplinary expertise.

Interpersonal and Organizational Communication Minor

https://www.unh.edu/program/minor/interpersonal-organizational-communication

Description

The minor in Interpersonal and Organizational Communication focuses specifically on communication that is internal to organizations. Students will survey theories of organizational communication, and explore key internal responsibilities and challenges that all organizations face, including: team dynamics, diversity, conflict, privacy, identifying and inspiring talent, and defining and achieving goals, among others. This minor is interdisciplinary in that the topics covered traverse many areas of study.

Note: This minor may not be declared with the following major: B.S. Professional Communication: Interpersonal and Organizational Communication.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
COM 560	Intercultural Communication	2
COM 562	Gender and Communication	2
COM 590	Professional Communication	4
COM 675	Organizational Communication	4
HRM 580	Change Management	4
MGMT 566	Organizational Behavior	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Identify the foundational theories of organizational communication.
- Assess challenges common to organizations, including conflict, stasis, and privacy, and devise actionable steps toward resolution.
- Explore strategies to enhance the internal workings of organizations from the perspectives of various stakeholders.

Professional Communication Major: Business and Strategic Communication Option (B.S.)

https://www.unh.edu/program/bachelor-science/professional-communication-business-strategic-communication

Description

The Bachelor of Science in Professional Communication hones the skills of analytical thinking, compelling writing, effective persuasion, and clear expression to prepare graduates to work in an information-based economy and to be engaged citizens of a media-driven culture. The major is well-suited to students interested in careers or further studies in such areas as public relations, public service, nonprofit advocacy, and corporate communications. Courses provide students the opportunity to study fundamental theory and multiple sectors of practice in the discipline of communication and to prepare to contribute to public and private enterprises that consistently need to convey messages effectively, manage information appropriately, and respond ethically and effectively to opportunities and to crises.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Professional Communication		
Foundation Courses		
COM 440	Persuasive Communication	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 465	Communication Theory	2
COM 480	Visual Communication	4
COM 560	Intercultural Communication	2
or COM 562	Gender and Communication	
Intermediate Courses		
COM 590	Professional Communication	4
COM 665	Media and Strategic Communication	4
COM 670	Advanced Visual Communication	4
Advanced Courses		
COM 765W	Strategic Communication	4
Option in Business and Strategic Communication		
COM 660W	Leveraging AI in Workplace Communication	4
COM 675	Organizational Communication	4
COM 710	Managerial Communication	4
LD 600	Becoming an Effective Leader	4
Select two of the following:		8
COM 707	Communication for Training and Performance Improvement	
HRM 580	Change Management	
HRM 635	Managing Conflict	
HUMN 480	Introduction to Ethics	
LD 660	Leadership Theory	
MGMT 566	Organizational Behavior	
Integrative Capstone		

COM 797	Integrative Capstone: Project in Professional Communication	4
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 440	Persuasive Communication	4
ENG 420	The Writing Process	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 465	Communication Theory	2
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
	Credits	**14**
Second Year		
Fall		
COM 460	Interpersonal Communication and Group Dynamics	4
COM 590	Professional Communication	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 665	Media and Strategic Communication	4
MGMT 566 or LD 660 or HUMN 480 or HRM 580 or HRM 635 or COM 707	Organizational Behavior or Leadership Theory or Introduction to Ethics or Change Management or Managing Conflict or Communication for Training and Performance Improvement	2 or 4
Genearal Education Course		4
Elective		4
	Credits	**14-16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
COM 765W	Strategic Communication	4
Elective		4
Elective		4
	Credits	**16**
Spring		
LD 600	Becoming an Effective Leader	4
COM 670	Advanced Visual Communication	4
LD 660 or COM 707 or MGMT 566 or HUMN 480 or HRM 580 or HRM 635	Leadership Theory or Communication for Training and Performance Improvement or Organizational Behavior or Introduction to Ethics or Change Management or Managing Conflict	2 or 4
Elective		4
	Credits	**14-16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
COM 660W	Leveraging AI in Workplace Communication	4
COM 710	Managerial Communication	4
Elective		4
	Credits	**16**
Spring		
COM 797	Integrative Capstone: Project in Professional Communication	4
Elective		4
Elective		2
Elective		4
	Credits	**14**
	Total Credits	**120-124**

Student Learning Outcomes

Program Learning Outcomes

- Survey foundational theories of communication relating to individuals, groups, and mass media.
- Create and deploy distinct messages suited to specific audiences and situations, in written, verbal, and digital formats.
- Compose, design, and deliver targeted and engaging presentations.
- Identify and respond to complex communication practices and challenges within organizations, and effect strategic improvements thereto.
- Analyze and critique rhetorical strategies and communication methods specific to cultural and industry norms.
- Employ an understanding of the impact of cultural differences on communication in a global context.

- Integrate individual reflection on questions of ethics and citizenship, particularly in digital contexts, to include the personal and professional ramifications of netiquette, digital footprint, and digital citizenship.
- Demonstrate aptitude with research methods, both quantitative and qualitative, as these inform and are applied in the field of professional communication.
- Develop specialized knowledge and skill in a specific aspect or professional practice within professional communication.

Professional Communication Major: Interpersonal and Organizational Communication Option (B.S.)

https://www.unh.edu/program/bachelor-science/professional-communication-interpersonal-organizational-communication

Description

The Bachelor of Science in Professional Communication hones the skills of analytical thinking, compelling writing, effective persuasion, and clear expression to prepare graduates to work in an information-based economy and to be engaged citizens of a media-driven culture. The major is well-suited to students interested in careers or further studies in such areas as public relations, public service, nonprofit advocacy, and corporate communications. Courses provide students the opportunity to study fundamental theory and multiple sectors of practice in the discipline of communication and to prepare to contribute to public and private enterprises that consistently need to convey messages effectively, manage information appropriately, and respond ethically and effectively to opportunities and to crises.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Professional Communication		
Foundational Courses		
COM 440	Persuasive Communication	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 465	Communication Theory	2
COM 560	Intercultural Communication	2
or COM 562	Gender and Communication	
COM 480	Visual Communication	4
Intermediate Courses		
COM 590	Professional Communication	4
COM 665	Media and Strategic Communication	4
COM 670	Advanced Visual Communication	4
Advanced Courses		
COM 765W	Strategic Communication	4
Option in Interpersonal & Organizational Communication		

COM 675	Organizational Communication	4
COM 660W	Leveraging AI in Workplace Communication	4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
HRM 580	Change Management	4
Select two of the following:		8
HRM 470	Human Resource Application in Today's Organizations	
HRM 635	Managing Conflict	
MGMT 566	Organizational Behavior	
HRM 740	Workplace Coaching	
Integrative Capstone		
COM 797	Integrative Capstone: Project in Professional Communication	4
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
COM 440	Persuasive Communication	4
ENG 420	The Writing Process	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 465	Communication Theory	2
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**14**
Second Year		
Fall		
COM 460	Interpersonal Communication and Group Dynamics	4
COM 590	Professional Communication	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
MGMT 566	Organizational Behavior	4
COM 670	Advanced Visual Communication	4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	4
General Education Course		4
Elective		4
	Credits	**20**
Third Year		
Fall		
COM 560 or COM 562	Intercultural Communication or Gender and Communication	2
COM 660W	Leveraging AI in Workplace Communication	4
COM 665	Media and Strategic Communication	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
Elective		4
	Credits	**18**
Spring		
COM 675	Organizational Communication	4
HRM 470 or HRM 580 or HRM 635 or HRM 740	Human Resource Application in Today's Organizations or Change Management or Managing Conflict or Workplace Coaching	4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
HRM 580 or HRM 470 or HRM 635 or HRM 740	Change Management or Human Resource Application in Today's Organizations or Managing Conflict or Workplace Coaching	4
Elective		4
	Credits	**12**
Spring		
COM 797	Integrative Capstone: Project in Professional Communication	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Survey foundational theories of communication relating to individuals, groups, and mass media.
- Create and deploy distinct messages suited to specific audiences and situations, in written, verbal, and digital formats.
- Compose, design, and deliver targeted and engaging presentations.

- Identify and respond to complex communication practices and challenges within organizations, and effect strategic improvements thereto.
- Analyze and critique rhetorical strategies and communication methods specific to cultural and industry norms.
- Employ an understanding of the impact of cultural differences on communication in a global context.
- Integrate individual reflection on questions of ethics and citizenship, particularly in digital contexts, to include the personal and professional ramifications of netiquette, digital footprint, and digital citizenship.
- Demonstrate aptitude with research methods, both quantitative and qualitative, as these inform and are applied in the field of professional communication.
- Develop specialized knowledge and skill in a specific aspect or professional practice within professional communication.

Professional Communication Major: Visual Communication and Social Media Option (B.S.)

https://www.unh.edu/program/bachelor-science/professional-communication-visual-communication-social-media

Description

The Bachelor of Science in Professional Communication hones the skills of analytical thinking, compelling writing, effective persuasion, and clear expression to prepare graduates to work in an information-based economy and to be engaged citizens of a media-driven culture. The major is well-suited to students interested in careers or further studies in such areas as public relations, public service, nonprofit advocacy, and corporate communications. Courses provide students the opportunity to study fundamental theory and multiple sectors of practice in the discipline of communication and to prepare to contribute to public and private enterprises that consistently need to convey messages effectively, manage information appropriately, and respond ethically and effectively to opportunities and to crises.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Professional Communication		
Foundational Courses		
COM 440	Persuasive Communication	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 465	Communication Theory	2
COM 480	Visual Communication	4
COM 560	Intercultural Communication	2
or COM 562	Gender and Communication	
Intermediate Courses		
COM 590	Professional Communication	4

COM 665	Media and Strategic Communication	4
COM 670	Advanced Visual Communication	4
Advanced Courses		
COM 765W	Strategic Communication	4
Option in Visual Communication and Social Media		
COM 504	Web Development I	4
COM 535	Visual Media Production	4
COM 680	Trends in Digital and Social Media	4
COM 660W	Leveraging AI in Workplace Communication	4
Select two of the following:		8
ART 512	Fundamentals of Design	
COM 685	Web Development II	
MKT 510	Principles of Marketing	
MKT 600	Social Media Marketing	
MKT 615	Digital Storytelling and Brand Management	
MKT 720	Digital Advertising	
Integrative Capstone		
COM 797	Integrative Capstone: Project in Professional Communication	4
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year

Fall		**Credits**
COM 440	Persuasive Communication	4
ENG 420	The Writing Process	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
COM 465	Communication Theory	2
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**14**

Second Year

Fall		
COM 460	Interpersonal Communication and Group Dynamics	4
COM 504	Web Development I	4
COM 535	Visual Media Production	4
Elective		4
	Credits	**16**
Spring		
COM 590	Professional Communication	4
General Education Course		4
General Education Course		4
Elective		4
	Credits	**16**

Third Year

Fall		
ART 512 or COM 685 or MKT 510 or MKT 600 or MKT 720	Fundamentals of Design or Web Development II or Principles of Marketing or Social Media Marketing or Digital Advertising	4
COM 665	Media and Strategic Communication	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
Elective		4
	Credits	**16**
Spring		
COM 670	Advanced Visual Communication	4
COM 685 or ART 512 or MKT 510 or MKT 600 or MKT 720	Web Development II or Fundamentals of Design or Principles of Marketing or Social Media Marketing or Digital Advertising	4
COM 765W	Strategic Communication	4
Elective		4
	Credits	**16**

Fourth Year

Fall		
COM 680	Trends in Digital and Social Media	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
COM 660W	Leveraging AI in Workplace Communication	4
Elective		2 - 4
	Credits	**14-16**
Spring		
COM 797	Integrative Capstone: Project in Professional Communication	4
Elective		4
Elective		4
	Credits	**12**
	Total Credits	**120-122**

Student Learning Outcomes

Program Learning Outcomes

- Survey foundational theories of communication relating to individuals, groups, and mass media.

- Create and deploy distinct messages suited to specific audiences and situations, in written, verbal, and digital formats.
- Compose, design, and deliver targeted and engaging presentations.
- Identify and respond to complex communication practices and challenges within organizations, and effect strategic improvements thereto.
- Analyze and critique rhetorical strategies and communication methods specific to cultural and industry norms.
- Employ an understanding of the impact of cultural differences on communication in a global context.
- Integrate individual reflection on questions of ethics and citizenship, particularly in digital contexts, to include the personal and professional ramifications of netiquette, digital footprint, and digital citizenship.
- Demonstrate aptitude with research methods, both quantitative and qualitative, as these inform and are applied in the field of professional communication.
- Develop specialized knowledge and skill in a specific aspect or professional practice within professional communication.

Visual Communication and Social Media Minor

https://www.unh.edu/program/minor/visual-communication-social-media

Description

The minor in Visual Communication and Social Media enables students to refine their skills in creating, analyzing, and deploying visual communication. Students will be challenged to think critically about the capacity for visual communication to transcend traditional modes, such as written and verbal communication, while carefully considering how to effectively align the mode of communication with message and audience. Particular emphasis is given to the intersection of visual communication with the fields of marketing and advertising.

Note: This minor may not be declared with the following major: B.S. Professional Communication: Visual Communication & Social Media.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Minor Requirements

Code	Title	Credits
COM 504	Web Development I	4
COM 670	Advanced Visual Communication	4
COM 680	Trends in Digital and Social Media	4
MKT 600	Social Media Marketing	4
MKT 720	Digital Advertising	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Develop the ability to lead and manage in the public interest.
- Participate in, and contribute to, the policy process.
- Articulate, apply, and advance a public service perspective.

Nonprofit and Public Sector Management

- Fire Service Administration Major (B.S.) (p. 616)
- Nonprofit Management Minor (p. 618)
- Public Administration and Policy Minor (p. 618)
- Public Administration Major (B.S.) (p. 619)

Fire Service Administration Major (B.S.)

https://www.unh.edu/program/bachelor-science/fire-service-administration

Description

The Bachelor of Science in Fire Service Administration degree prepares fire service professionals with the leadership, management, and administrative knowledge and skills essential to advance in the fire service field. The program integrates knowledge and skills necessary to mitigate the ethical, moral, social, and situational challenges of fire and emergency services. Entry into this program requires a conferred Associate Degree in Fire Science or an approved field, and certification as an NFPA 1001 Firefighter II issued by a Pro Board or IFSAC-accredited agency.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are

considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prerequisite: Must have completed an Associate Degree or equivalent in Fire Science field.

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 Interdisciplinary Seminar. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Fire Service Administration		
Intermediate Courses		
FSA 603	Principles of Emergency Services	4
COM 590	Professional Communication	4
COM 665	Media and Strategic Communication	4
or COM 710	Managerial Communication	
FSA 605	Fire Service Ethics	4
FSA 610	Community Risk Reduction for the Fire and Emergency Services	4
FSA 635	Political and Legal Foundations for Fire Protection	4
MTH 504	Statistics	4
BEHS 665	Disaster Management	4
Advanced Courses		
PADM 645	Public Sector Budget and Finance	4
FSA 710	Personnel Management for the Fire Service	4
FSA 740	Applications of Fire Research	4
FSA 760	Fire and Emergency Services Administration	4
Integrative Capstone		
FSA 797	Integrative Capstone: Research Project in Fire Service Administration	4
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence - For students with conferred associate degree

First Year		
Fall		**Credits**
FSA 603	Principles of Emergency Services	4
COM 590	Professional Communication	4
FSA 605	Fire Service Ethics	4
FSA 610	Community Risk Reduction for the Fire and Emergency Services	4
	Credits	**16**
Spring		
FSA 635	Political and Legal Foundations for Fire Protection	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
BEHS 665	Disaster Management	4
FSA 710	Personnel Management for the Fire Service	4
	Credits	**16**
Second Year		
Fall		
FSA 760	Fire and Emergency Services Administration	4
MTH 504	Statistics	4
PADM 645	Public Sector Budget and Finance	4
	Credits	**12**

Spring		
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
FSA 740	Applications of Fire Research	4
	Credits	**8**
Third Year		
Fall		
COM 665 or COM 710	Media and Strategic Communication or Managerial Communication	4
FSA 797	Integrative Capstone: Research Project in Fire Service Administration	4
	Credits	**8**
	Total Credits	**60**

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate leadership skills and utilize administrative techniques related to the organizational management of fire and emergency services.
- Integrate research, critical thinking, and analytical decision-making skills to address challenges faced in the delivery and execution of modern fire and emergency services.
- Apply principles of ethics to evaluate fire and emergency services moral and social issues and make principle-based decisions.
- Identify and prioritize public safety threats and hazards and develop fire and emergency service community risk reduction plans.
- Conduct dynamic situational assessments and apply knowledge of risk reduction to develop strategic incident action plans that are consistent with professional standards and best practices to mitigate emergencies or disasters in the community.

Nonprofit Management Minor

https://www.unh.edu/program/minor/nonprofit-management

Description

The minor in nonprofit management provides a comprehensive view of not-for-profit organizations. The topics discussed in the minor revenue streams, development, and fundraising.

NOTE: This minor may not be declared with the following major: BS Business Management: Nonprofit Management.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Minor Requirements

Code	Title	Credits
MGMT 707	Nonprofit Management	4
MGMT 715	Financial Management for Nonprofit Organizations	4
LD 725	Volunteer Leadership	4
MKT 705	Marketing for Nonprofits	4
Select one of the following:		4
APST 705	Grant Writing	
MGMT 608	Fostering Inclusion and Diversity in the Workplace	
MGMT 706	Fundraising and Resource Development	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Formulate an understanding of nonprofit management.
- Examine financial management and revenue streams for nonprofit organizations.
- Apply relevant marketing theories and practice to nonprofit organizations.
- Identify best practices in volunteer management.

Public Administration and Policy Minor

https://www.unh.edu/program/minor/public-administration-policy

Description

The minor in Public Administration and Policy offers students the appropriate depth and breadth of public administration, leadership, and public policy curriculum.

Note: This minor may not be declared with the following major: B.S. Public Administration.

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Minor Requirements

Code	Title	Credits
PADM 500	Introduction to Public Administration	4
PADM 600	Public Policy Development and Implementation	4
PADM 645	Public Sector Budget and Finance	4
PADM 670	Human Resources in the Public Sector	4
Select one of the following:		4
APST 705	Grant Writing	
COM 665	Media and Strategic Communication	
LD 725	Volunteer Leadership	
MGMT 706	Fundraising and Resource Development	
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Develop the ability to lead and manage in the public interest.
- Participate in, and contribute to, the policy process.
- Articulate, apply, and advance a public service perspective.

Public Administration Major (B.S.)

https://www.unh.edu/program/bachelor-science/public-administration

Description

The Bachelor of Science degree in Public Administration offers students depth and breadth in public administration, leadership, and public policy. The degree is designed to meet the educational needs of public administration professionals and includes an appropriate foundation for further graduate study for a Master's in Public Administration or Master's in Leadership. The outcomes-based program is built upon a foundation of essential public administration competencies that are integrated throughout the curriculum: public administration, leadership, public policy, ethics, strategic communication, human resource management, budgeting and finance, government relations, and community engagement.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Public Administration		
Foundation Courses		
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
DAT 510	Introduction to Data Analytics	4
HUMN 480	Introduction to Ethics	4
PADM 500	Introduction to Public Administration	4
Intermediate Courses		
MTH 504	Statistics	4
HRM 580	Change Management	4
PADM 600	Public Policy Development and Implementation	4
PADM 645	Public Sector Budget and Finance	4
PADM 670	Human Resources in the Public Sector	4
Advanced Courses		
APST 705	Grant Writing	4
or MGMT 706	Fundraising and Resource Development	
LD 600	Becoming an Effective Leader	4
or LD 660	Leadership Theory	
LD 725	Volunteer Leadership	4
or COM 665	Media and Strategic Communication	
Integrative Capstone		
MGMT 795	Integrative Capstone: Industry-Based Internship	4

or MGMT 797	Integrative Capstone: Industry-Based Project	
Total Credits		**52**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
APST 405	Career Development and Planning	2
CMPL 402	Excel	2
ENG 420	The Writing Process	4
PADM 500	Introduction to Public Administration	4
General Education Course		4
	Credits	**16**
Spring		
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
HUMN 480	Introduction to Ethics	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
COM 480	Visual Communication	4
HRM 580	Change Management	4
MTH 504	Statistics	4
General Education Course		4
	Credits	**16**
Spring		
DAT 510	Introduction to Data Analytics	4
LD 600 or LD 660	Becoming an Effective Leader or Leadership Theory	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
PADM 600	Public Policy Development and Implementation	4
COM 665 or LD 725	Media and Strategic Communication or Volunteer Leadership	4
Elective		4
	Credits	**16**
Spring		
PADM 645	Public Sector Budget and Finance	4
PADM 670	Human Resources in the Public Sector	4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
APST 705 or MGMT 706	Grant Writing or Fundraising and Resource Development	4
IDIS 601		4
Elective		4
Elective		4
	Credits	**16**
Spring		
MGMT 797 or MGMT 795	Integrative Capstone: Industry-Based Project or Integrative Capstone: Industry-Based Internship	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Develop the ability to lead and manage in the public interest.
- Participate in, and contribute to, the policy process.
- Analyze, synthesize, think critically, solve problems, and make evidence-informed decisions in a complex and dynamic environment.
- Articulate, apply, and advance a public service perspective.
- Communicate and interact productively and in culturally responsive ways with a diverse and changing workforce and society at large.

Technology

- Computer Information Technology Major (A.B.S.) (p. 621)
- Computer Information Technology Major: Artificial Intelligence and Machine Learning Option (B.S.) (p. 622)
- Computer Information Technology Major: Cloud Computing Option (B.S.) (p. 624)
- Computer Information Technology Major: Cybersecurity Option (B.S.) (p. 626)
- Computer Information Technology Major: Data Analytics Option (B.S.) (p. 628)
- Computer Information Technology Major: Software Development Option (B.S.) (p. 629)

- Computer Information Technology Minor (p. 631)
- Technology Management Major (B.S.) (p. 632)

Computer Information Technology Major (A.B.S.)

https://www.unh.edu/program/applied-bachelor-science/computer-information-technology

Description

The **Applied Bachelor of Science (A.B.S.) in Computer Information Technology** is a comprehensive 90-credit, three-year program focused on building industry-relevant knowledge and skills in programming, data analytics, virtualization and cloud computing, database management, systems analysis, digital forensics, and professional codes of ethics. Hands-on learning environments and problem-solving engagement prepares learners for professional certification and candidacy as an IT generalist, ensuring qualification for a broad range of technology roles.

Requirements

Degree Requirements

Minimum Credit Requirement: 90 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral

Core Curriculum Required: General Education Program

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402	Math for Our World	4
or MTH 504	Statistics	
or MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

A minimum grade of C- is required in all Major coursework.

Code	Title	Credits
Foundation Courses		
CMPL 402	Excel	2
CMPL 415	Programming Fundamentals	4
CMPL 525	Foundations of Cybersecurity	4
Intermediate Courses		
APST 605A	Practicum Business & Technology	4
CMPL 610	Artificial Intelligence for Information Technology Professionals	4
or CMPL 620	Virtualization and Cloud Computing	
Advanced Courses		
CMPL 614	Computer and Network Systems	4
CMPL 641	Database Management Systems	4
Core Courses		
DAT 510	Introduction to Data Analytics	4
CMPL 530	Python Programming I	4
CMPL 637	Python Programming II	4
CMPL 640	Digital Forensics	4
CMPL 645	Ethical Hacking	4
Capstone		
APST 695A	Integrative Capstone	4
Total Credits		**50**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
CMPL 402	Excel	2
CMPL 415	Programming Fundamentals	4
CMPL 525	Foundations of Cybersecurity	4
ENG 420	The Writing Process	4
	Credits	**14**
Spring		
DAT 510	Introduction to Data Analytics	4
CMPL 530	Python Programming I	4
CMPL 637	Python Programming II	4
COM 460	Interpersonal Communication and Group Dynamics	4
	Credits	**16**

Second Year		
Fall		
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
CMPL 641	Database Management Systems	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Spring		
CMPL 614	Computer and Network Systems	4
Knowledge of Human Behavior & Social Systems		4
CMPL 610 or CMPL 620	Artificial Intelligence for Information Technology Professionals or Virtualization and Cloud Computing	4
Knowledge of the Physical & Natural World		4
	Credits	**16**
Third Year		
Fall		
APST 605A	Practicum Business & Technology	4
CMPL 645	Ethical Hacking	4
CMPL 640	Digital Forensics	4
Knowledge of Human Thought & Expression		4
	Credits	**16**
Spring		
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
APST 695A	Integrative Capstone	4
	Credits	**12**
	Total Credits	**90**

Student Learning Outcomes

Program Learning Outcomes

- Apply computing principles, programming methodologies, data analysis, and security assessments to design, develop, and optimize secure, effective solutions across diverse computing environments.
- Apply ethical, legal, and professional standards in the development, security, and management of technology solutions, ensuring compliance with industry best practices.
- Adapt professional communication to convey complex technical concepts to various stakeholder audiences.
- Employ industry-standard teamwork and coordination strategies to collaborate constructively within multidisciplinary teams to develop and deploy computing solutions that address business needs.

Disclosures

Degree type: Applied Bachelor of Science (A.B.S.)

UNH's Applied Bachelor's in Computer Information Technology 90-credit, three-year degree is not equivalent to a traditional, four-year baccalaureate degree. It is an accelerated degree program that some graduate programs, professional schools, and employers may not recognize or accept. Any student who wishes to may, at any time during their course of study, seamlessly transition from the 90-credit, three-year to the 120-credit, four-year Computer Information Technology degree program. UNH's applied bachelor's programs are eligible for Title IV federal financial aid. However, students who leave UNH having completed an applied bachelor's degree but later choose to return to UNH or attend another institution to complete additional undergraduate credits, either to earn a certificate of post-baccalaureate studies or to earn a second bachelor's degree, will not be eligible for federal grant aid and may have limited eligibility for other federal aid programs. Please reach out to UNH CPSO Admissions at 1-855-472-4255 or admissions.cps@unh.edu if you have questions or need additional information.

Computer Information Technology Major: Artificial Intelligence and Machine Learning Option (B.S.)

https://www.unh.edu/program/bachelor-science/computer-information-technology-artificial-intelligence-machine-learning-option

Description

The major in Computer Information Technology focuses on information, its management, and processing within an organization, as well as the application of technology to create, exchange, store, and use information in that context. The focus is on the business use of information and the application of computing technology. Graduates will typically follow career paths as application development programmers, planners, and designers of information systems, as well as information systems managers within organizations. The degree provides versatility through a best practices approach to the core areas of Information Technology.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major,

Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Code	Title	Credits
Required Courses		
Foundation Courses		
CMPL 415	Programming Fundamentals	4
CMPL 512	Advanced Software Tools	4
CMPL 525	Foundations of Cybersecurity	4
Intermediate Courses		
CMPL 614	Computer and Network Systems	4
CMPL 622	Human Computer Interaction	4
MTH 504	Statistics	4
Advanced Courses		
CMPL 620	Virtualization and Cloud Computing	4
CMPL 641	Database Management Systems	4
CMPL 642	Systems Analysis and Design	4
Option in Artificial Intelligence and Machine Learning		
CMPL 570	Foundations of AI: A Business Perspective	4
CMPL 572	Foundations of Machine Learning	4
CMPL 610	Artificial Intelligence for Information Technology Professionals	4
CMPL 618	Mathematics for AI and Machine Learning	4
CMPL 750	Programming for AI with Python	4
Integrative Capstone		
CMPL 795	Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
or CMPL 797	Integrative Capstone: Best Practices in Information Technology	
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
CMPL 415	Programming Fundamentals	4
CMPL 525	Foundations of Cybersecurity	4
ENG 420	The Writing Process	4
General Education Course		4
	Credits	**16**
Spring		
CMPL 512	Advanced Software Tools	4
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
CMPL 614	Computer and Network Systems	4
COM 480	Visual Communication	4
General Education Course		4
Elective Course		4
	Credits	**16**
Spring		
CMPL 622	Human Computer Interaction	4
MTH 504	Statistics	4
General Education Course		4
Elective Course		4
	Credits	**16**

Third Year		
Fall		
CMPL 570	Foundations of AI: A Business Perspective	4
CMPL 572	Foundations of Machine Learning	4
CMPL 610	Artificial Intelligence for Information Technology Professionals	4
Elective Course		4
	Credits	**16**
Spring		
CMPL 618	Mathematics for AI and Machine Learning	4
CMPL 620	Virtualization and Cloud Computing	4
CMPL 641	Database Management Systems	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
	Credits	**16**
Fourth Year		
Fall		
CMPL 750	Programming for AI with Python	4
CMPL 642	Systems Analysis and Design	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective Course		4
	Credits	**16**
Spring		
CMPL 797 or CMPL 795	Integrative Capstone: Best Practices in Information Technology or Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
Elective Course		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Address the needs of organizational IT challenges using software programming fundamentals, network systems design, machine learning techniques, database management, code libraries, and web-based interface and application development.
- Develop solutions to IT challenges according to process models that align with information technology theories and industry-based strategies.
- Use applied analysis and evaluation strategies to plan, gather information, execute, optimize, and troubleshoot hardware, software, and network systems.
- Assess the needs of IT system end-users and develop strategies to fulfill them through hardware- and software-based design solutions.
- Develop cybersecurity strategies for the legal and ethical use of cryptography to protect IT assets from criminal threats.

Computer Information Technology Major: Cloud Computing Option (B.S.)

https://www.unh.edu/program/bachelor-science/computer-information-technology-cloud-computing

Description

The major in Computer Information Technology (CIT) with an option in Cloud Computing prepares students to design, manage, and optimize secure, scalable cloud environments that support modern IT operations. Through courses in cloud infrastructure, virtualization, security and privacy, financial management, and advanced applications, students gain practical skills in configuring, automating, and troubleshooting multi-cloud and hybrid systems. Emphasis is placed on industry best practices, governance, compliance, and identity management, as well as integrating AI and machine learning solutions within cloud platforms. Graduates of this option are well-equipped for careers such as cloud architect, cloud security specialist, DevOps engineer, or cloud financial manager. They are prepared to help organizations maximize the value of their cloud investments.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4

MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Code	Title	Credits
Major in Computer Information Technology		
Foundation Courses		
CMPL 415	Programming Fundamentals	4
CMPL 512	Advanced Software Tools	4
CMPL 525	Foundations of Cybersecurity	4
Intermediate Courses		
CMPL 614	Computer and Network Systems	4
CMPL 622	Human Computer Interaction	4
MTH 504	Statistics	4
Advanced Courses		
CMPL 610	Artificial Intelligence for Information Technology Professionals	4
CMPL 641	Database Management Systems	4
CMPL 642	Systems Analysis and Design	4
Option in Cloud Computing		
CMPL 550	CompTIA Cloud Computing I	4
CMPL 552	Cloud Security and Privacy	4
CMPL 620	Virtualization and Cloud Computing	4
CMPL 630	CompTIA Cloud Computing II	4
CMPL 632	Cloud Financial Management	4
Integrative Capstone		
CMPL 795	Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
or CMPL 797	Integrative Capstone: Best Practices in Information Technology	

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
CMPL 415	Programming Fundamentals	4
CMPL 525	Foundations of Cybersecurity	4
ENG 420	The Writing Process	4
General Education Course		4
	Credits	**16**
Spring		
CMPL 512	Advanced Software Tools	4
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
CMPL 614	Computer and Network Systems	4
COM 480	Visual Communication	4
General Education Course		4
Elective Course		4
	Credits	**16**
Spring		
CMPL 622	Human Computer Interaction	4
MTH 504	Statistics	4
General Elective Course		4
Elective Course		4
	Credits	**16**
Third Year		
Fall		
CMPL 550	CompTIA Cloud Computing I	4
CMPL 552	Cloud Security and Privacy	4
CMPL 620	Virtualization and Cloud Computing	4
Elective Course		4
	Credits	**16**
Spring		
CMPL 630	CompTIA Cloud Computing II	4
CMPL 610	Artificial Intelligence for Information Technology Professionals	4
CMPL 641	Database Management Systems	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
	Credits	**16**

Fourth Year		
Fall		
CMPL 632	Cloud Financial Management	4
CMPL 642	Systems Analysis and Design	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective Course		4
	Credits	**16**
Spring		
CMPL 797 or CMPL 795	Integrative Capstone: Best Practices in Information Technology or Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
Elective Course		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Address the needs of organizational IT challenges using software programming fundamentals, network systems design, machine learning techniques, database management, code libraries, and web-based interface and application development.
- Develop solutions to IT challenges according to process models that align with information technology theories and industry-based strategies.
- Use applied analysis and evaluation strategies to plan, gather information, execute, optimize, and troubleshoot hardware, software, and network systems.
- Assess the needs of IT system end-users and develop strategies to fulfill them through hardware- and software-based design solutions.
- Manage the infrastructure, migration strategies, security measures, financial management, AI leveraging, and performance optimization of virtual environments according to industry-standard cloud computing principles.

Computer Information Technology Major: Cybersecurity Option (B.S.)

https://www.unh.edu/program/bachelor-science/computer-information-technology-cybersecurity

Description

The major in Computer Information Technology (CIT) with an option in Cybersecurity prepares students to protect systems, networks, and data from evolving digital threats. Courses in cryptography, security risk assessment, digital forensics, ethical hacking, and cybersecurity law provide both technical and strategic perspectives on safeguarding information assets. Students gain hands-on experience identifying vulnerabilities, responding to incidents, and applying legal and ethical frameworks that govern the field. Graduates are prepared for roles such as security analyst, security engineer, digital forensics specialist, penetration tester, or compliance officer, ensuring organizations remain resilient against cyberattacks and data breaches.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		

One Writing Intensive course at the 600-level or above	
One Additional Writing Intensive Course	

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Code	Title	Credits
Major in Computer Information Technology		
Foundation Courses		
CMPL 415	Programming Fundamentals	4
CMPL 512	Advanced Software Tools	4
CMPL 525	Foundations of Cybersecurity	4
Intermediate Courses		
CMPL 614	Computer and Network Systems	4
CMPL 622	Human Computer Interaction	4
MTH 504	Statistics	4
Advanced Courses		
CMPL 620	Virtualization and Cloud Computing	4
CMPL 641	Database Management Systems	4
CMPL 642	Systems Analysis and Design	4
Option in Cybersecurity		
CMPL 564	Introduction to Cryptography	4
CMPL 566	Security Risk Assessment	4
CMPL 640	Digital Forensics	4
CMPL 645	Ethical Hacking	4
CMPL 744	Cybersecurity Law	4
Integrative Capstone		
CMPL 795	Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
or CMPL 797	Integrative Capstone: Best Practices in Information Technology	

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
CMPL 415	Programming Fundamentals	4
CMPL 525	Foundations of Cybersecurity	4
ENG 420	The Writing Process	4
General Education Course		4
	Credits	**16**
Spring		
CMPL 512	Advanced Software Tools	4
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
CMPL 614	Computer and Network Systems	4
COM 480	Visual Communication	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
CMPL 622	Human Computer Interaction	4
MTH 504	Statistics	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CMPL 564	Introduction to Cryptography	4
CMPL 566	Security Risk Assessment	4
CMPL 637	Python Programming II	4
Elective		4
	Credits	**16**
Spring		
CMPL 641	Database Management Systems	4
CMPL 640	Digital Forensics	4
CMPL 645	Ethical Hacking	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
	Credits	**16**
Fourth Year		
Fall		
CMPL 642	Systems Analysis and Design	4
CMPL 744	Cybersecurity Law	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
	Credits	**16**
Spring		
CMPL 795 or CMPL 797	Integrative Capstone: Internship in Computer Information Tech and Tech Management or Integrative Capstone: Best Practices in Information Technology	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Address the needs of organizational IT challenges using software programming fundamentals, network systems design, machine learning techniques, database management, code libraries, and web-based interface and application development.
- Develop solutions to IT challenges according to process models that align with information technology theories and industry-based strategies.
- Use applied analysis and evaluation strategies to plan, gather information, execute, optimize, and troubleshoot hardware, software, and network systems.
- Assess the needs of IT system end-users and develop strategies to fulfill them through hardware- and software-based design solutions.
- Develop cybersecurity strategies for the legal and ethical use of cryptography to protect IT assets from criminal threats.

Computer Information Technology Major: Data Analytics Option (B.S.)

https://www.unh.edu/program/bachelor-science/computer-information-technology-data-analytics

Description

The major in Computer Information Technology (CIT) with an option in Data Analytics prepares students to apply data-driven methods to solve real-world problems and support organizational decision-making. Through courses in data mining, data cleaning, data visualization, advanced analytics, and business intelligence, students develop the technical and analytical skills necessary to manage and interpret complex datasets. Emphasis is placed on using modern tools and technologies to uncover patterns, generate insights, and communicate findings effectively. Graduates are prepared for careers such as data analyst, business intelligence specialist, or data engineer, helping organizations transform raw data into actionable knowledge.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Computer Information Technology		
Foundation Courses		
CMPL 415	Programming Fundamentals	4
CMPL 512	Advanced Software Tools	4
CMPL 525	Foundations of Cybersecurity	4
Intermediate Courses		
CMPL 614	Computer and Network Systems	4
CMPL 622	Human Computer Interaction	4
MTH 504	Statistics	4
Advanced Courses		
CMPL 620	Virtualization and Cloud Computing	4
CMPL 641	Database Management Systems	4
CMPL 642	Systems Analysis and Design	4
Option in Data Analytics		
DAT 510	Introduction to Data Analytics	4
DAT 535	Data Mining, Cleaning, and Visualization	4
DAT 610	Data Analytics and Technologies	4
DAT 620	Data Analytics in Business Intelligence	4
DAT 670	Advanced Data Analytics	4
Integrative Capstone		
CMPL 795	Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
or CMPL 797	Integrative Capstone: Best Practices in Information Technology	
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
CMPL 415	Programming Fundamentals	4
CMPL 525	Foundations of Cybersecurity	4
ENG 420	The Writing Process	4
General Education Course		4
	Credits	**16**
Spring		
CMPL 512	Advanced Software Tools	4
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
CMPL 614	Computer and Network Systems	4
COM 480	Visual Communication	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
CMPL 622	Human Computer Interaction	4
MTH 504	Statistics	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CMPL 620	Virtualization and Cloud Computing	4
DAT 510	Introduction to Data Analytics	4
DAT 535	Data Mining, Cleaning, and Visualization	4
Elective		4
	Credits	**16**
Spring		
CMPL 641	Database Management Systems	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
DAT 610	Data Analytics and Technologies	4
DAT 620	Data Analytics in Business Intelligence	4
	Credits	**16**
Fourth Year		
Fall		
CMPL 642	Systems Analysis and Design	4
DAT 670	Advanced Data Analytics	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
Elective		4
	Credits	**16**
Spring		
CMPL 797 or CMPL 795	Integrative Capstone: Best Practices in Information Technology or Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Address the needs of organizational IT challenges using software programming fundamentals, network systems design, machine learning techniques, database management, code libraries, and web-based interface and application development.
- Develop solutions to IT challenges according to process models that align with information technology theories and industry-based strategies.
- Use applied analysis and evaluation strategies to plan, gather information, execute, optimize, and troubleshoot hardware, software, and network systems.
- Assess the needs of IT system end-users and develop strategies to fulfill them through hardware- and software-based design solutions.
- Employ a range of technical, statistical, and predictive methods to analyze and communicate quantitative data for business decisions.

Computer Information Technology Major: Software Development Option (B.S.)

https://www.unh.edu/program/bachelor-science/computer-information-technology-software-development

Description

The major in Computer Information Technology (CIT) with an option in Software Development prepares students to design, build, and deploy applications across multiple platforms. Courses in Python, JavaScript, web application development, and mobile application development provide a strong foundation in programming and software engineering practices. Students gain hands-on experience creating functional, user-centered solutions while learning industry-relevant tools and frameworks. Graduates are prepared for careers such as software developer, full-stack developer, application programmer, or web and mobile app developer, equipped with the skills to contribute to innovative software solutions in a variety of organizational settings.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Major Requirements

Prior to capstone enrollment, students are expected to complete all General Education program requirements. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Refer to the Degree Plan for a sample course sequence. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Computer Information Technology		
Foundation Courses		
CMPL 415	Programming Fundamentals	4
CMPL 512	Advanced Software Tools	4
CMPL 525	Foundations of Cybersecurity	4
Intermediate Courses		
CMPL 614	Computer and Network Systems	4
CMPL 622	Human Computer Interaction	4
MTH 504	Statistics	4
Advanced Courses		
CMPL 620	Virtualization and Cloud Computing	4
CMPL 641	Database Management Systems	4
CMPL 642	Systems Analysis and Design	4
Option in Software Development		
CMPL 530	Python Programming I	4
CMPL 637	Python Programming II	4
CMPL 648	Programming with JavaScript	4
CMPL 665	Web Application Development	4
CMPL 760	Mobile Application Development	4
Integrative Capstone		
CMPL 795	Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
or CMPL 797	Integrative Capstone: Best Practices in Information Technology	
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
CMPL 415	Programming Fundamentals	4
CMPL 525	Foundations of Cybersecurity	4
ENG 420	The Writing Process	4
General Education Course		4
	Credits	**16**

Spring		
CMPL 512	Advanced Software Tools	4
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
CMPL 614	Computer and Network Systems	4
COM 480	Visual Communication	4
General Education Course		4
Elective		4
	Credits	**16**
Spring		
CMPL 622	Human Computer Interaction	4
MTH 504	Statistics	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
CMPL 530	Python Programming I	4
CMPL 620	Virtualization and Cloud Computing	4
CMPL 637	Python Programming II	4
Elective		4
	Credits	**16**
Spring		
CMPL 641	Database Management Systems	4
CMPL 648	Programming with JavaScript	4
CMPL 665	Web Application Development	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
	Credits	**16**
Fourth Year		
Fall		
CMPL 642	Systems Analysis and Design	4
IDIS 601A or IDIS 601B or IDIS 601C	Interdisciplinary Seminar: Being Happy or Interdisciplinary Seminar: Business of Beer or Interdisciplinary Seminar: Paranormal Activities	4
CMPL 760	Mobile Application Development	4
Elective		4
	Credits	**16**
Spring		
CMPL 797 or CMPL 795	Integrative Capstone: Best Practices in Information Technology or Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Address the needs of organizational IT challenges using software programming fundamentals, network systems design, machine learning techniques, database management, code libraries, and web-based interface and application development.
- Develop solutions to IT challenges according to process models that align with information technology theories and industry-based strategies.
- Use applied analysis and evaluation strategies to plan, gather information, execute, optimize, and troubleshoot hardware, software, and network systems.
- Assess the needs of IT system end-users and develop strategies to fulfill them through hardware- and software-based design solutions.
- Design, implement, test, and maintain software solutions using industry-standard programming languages, frameworks, and development methodologies, with a focus on creating scalable, secure, and user-centered applications.

Computer Information Technology Minor

https://www.unh.edu/program/minor/computer-information-technology

Description

This minor enables managers at any level to understand and use information technology as a resource to improve an organization's efficiency.

Note: This minor may not be declared with the following majors: B.S.Technology Management or B.S. Computer Information Technology (all options).

Requirements

All minor courses must be completed with a minimum grade of C-, and a 2.0 grade point average must be maintained in courses for the minor. Two courses must be at the upper level (600 or 700). Only 8 credits may overlap between major and minor.

Required Courses

Code	Title	Credits
CMPL 415	Programming Fundamentals	4
CMPL 512	Advanced Software Tools	4
CMPL 614	Computer and Network Systems	4
CMPL 641	Database Management Systems	4
CMPL 642	Systems Analysis and Design	4
Total Credits		**20**

Student Learning Outcomes

Program Learning Outcomes

Students will have the opportunity to:

- Acquire managerial knowledge of informational technology software, hardware and programming.
- Apply technological skills to advance efficiency of professional settings.
- Ask critical questions about information and research in the field of Information Technology.

Technology Management Major (B.S.)

https://www.unh.edu/program/bachelor-science/technology-management

Description

The Technology Management major provides technology proficiency together with the managerial know-how that employers need. With a sound base of knowledge in the core areas of programming, networks, databases, web, and digital media, combined with both fundamental upper-level management courses such as leadership, organizational development, and project management, graduates will be capable of managing technical staff and projects, but will also develop their capacities as strategic leaders who understand changing organizations and can make a contribution even as trends continuously emerge.

Requirements

Degree Requirements

Minimum Credit Requirement: 120 credits

Minimum Residency Requirement: 30 credits must be taken at UNH

Minimum Cumulative GPA: 2.0 is required for conferral*

Core Curriculum Required: General Education Program

Major, Option and Elective Requirements as indicated.

**GPA: Major and any state certification GPA requirements may be higher and are indicated in program details.*

A minimum grade of C- is required in all Major coursework. Some programs may have higher grade requirements for Major coursework as noted in the Major requirements section below. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor, and General Education requirements with only 8 credits overlapped between the Major and Minor. Please note that Option requirements are considered part of the Major. Students must complete 16 upper-level credits in majors within the College of Professional Studies, Online.

General Education Program Requirements

A minimum grade of D- is required in all General Education coursework. Students are allowed a maximum of two course overlaps. Overlaps can be used between Major, Minor and General Education requirements with only 8 credits overlapped between the Major and Minor.

All General Education requirements must be taken prior to the capstone.

Code	Title	Credits
ENG 420	The Writing Process	4
COM 460	Interpersonal Communication and Group Dynamics	4
COM 480	Visual Communication	4
CRIT 501	Introduction to Critical Inquiry	4
Select one of the following:		4
MTH 402	Math for Our World	
MTH 504	Statistics	
MTH 510	Pre-Calculus	
Knowledge of Human Behavior & Social Systems (p. 34)		4
Knowledge of the Physical & Natural World (p. 34)		4
Knowledge of Human Thought & Expression (p. 34)		4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
IDIS 601A	Interdisciplinary Seminar: Being Happy	4
or IDIS 601B	Interdisciplinary Seminar: Business of Beer	
or IDIS 601C	Interdisciplinary Seminar: Paranormal Activities	
Total Credits		**40**

Writing Program Requirements

All bachelor's degree candidates are required to complete four writing intensive courses as part of the University Writing Program Requirements as follows:

Code	Title	Credits
ENG 420	The Writing Process	
One Writing Intensive course in the Major		
One Writing Intensive course at the 600-level or above		
One Additional Writing Intensive Course		

Writing Intensive courses are identified with the label "Writing Intensive Course" in the "Attributes" section of the course description and/or a W following the course number.

Major Requirements

Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 . Students should consult with their advisor regarding specific major courses that may be completed with their capstone. Academic Advisor approval is required for registration to be processed.

Code	Title	Credits
Major in Technology Management		
Foundation Courses		
COM 590	Professional Communication	4
CMPL 415	Programming Fundamentals	4
CMPL 512	Advanced Software Tools	4
CMPL 525	Foundations of Cybersecurity	4
MGMT 410	Principles of Management	4
Intermediate Courses		
CMPL 614	Computer and Network Systems	4
CMPL 641	Database Management Systems	4
CMPL 643	Managing Information Technology	4
MTH 504	Statistics	4
MGMT 569	Budget Management	4
Advanced Courses		
CMPL 642	Systems Analysis and Design	4
LD 600	Becoming an Effective Leader	4
MGMT 626	Project Management Strategies	4
Select one of the following:		4
MGMT 608	Fostering Inclusion and Diversity in the Workplace	
or HRM 580	Change Management	
or HRM 635	Managing Conflict	
Integrative Capstone		

CMPL 795	Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
or CMPL 797	Integrative Capstone: Best Practices in Information Technology	
Total Credits		**60**

Electives

Open electives are courses students will need to take in addition to their general education and major requirements in order to satisfy the remaining credit totals for their programs. Open electives are defined as any credit course offered by the College not already included in the student's general education, major, option or minor. Students will need 120 credits total to graduate with a bachelor's degree from the Online Division of the College of Professional Studies.

Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH CPS Online undergraduate students should develop individual academic plans with their academic advisor during their first year at UNH.

Sample Course Sequence

First Year		
Fall		**Credits**
CMPL 415	Programming Fundamentals	4
ENG 420	The Writing Process	4
MGMT 410	Principles of Management	4
General Education Course		4
	Credits	**16**
Spring		
CMPL 525	Foundations of Cybersecurity	4
COM 460	Interpersonal Communication and Group Dynamics	4
CRIT 501	Introduction to Critical Inquiry	4
MTH 402 or MTH 504 or MTH 510	Math for Our World or Statistics or Pre-Calculus	4
	Credits	**16**
Second Year		
Fall		
CMPL 512	Advanced Software Tools	4
CMPL 614	Computer and Network Systems	4
COM 480	Visual Communication	4
MTH 504	Statistics	4
	Credits	**16**
Spring		
COM 590	Professional Communication	4
MGMT 569	Budget Management	4
General Education Course		4
Elective		4
	Credits	**16**
Third Year		
Fall		
MGMT 626	Project Management Strategies	4
CMPL 643	Managing Information Technology	4
CRIT 602	Advanced Critical Analysis and Strategic Thinking	4
Elective		4
	Credits	**16**
Spring		
CMPL 641	Database Management Systems	4
LD 600	Becoming an Effective Leader	4
General Education Course		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
CMPL 642	Systems Analysis and Design	4
HRM 580 or HRM 635 or MGMT 608	Change Management or Managing Conflict or Fostering Inclusion and Diversity in the Workplace	4
IDIS 601		4
Elective		4
	Credits	**16**
Spring		
CMPL 797 or CMPL 795	Integrative Capstone: Best Practices in Information Technology or Integrative Capstone: Internship in Computer Information Tech and Tech Management	4
Elective		4
	Credits	**8**
	Total Credits	**120**

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate a sound understanding of fundamental management and accounting practices.
- Possess proficiency in technology, including fundamentals of programming, network systems, databases, and the web.
- Lead teams, manage projects and make decisions effectively.
- Communicate successfully to and with technical and non-technical audiences.
- Engage with emerging trends in the rapidly evolving environments of technology and business, and understand their potential applications and risks.
- Assess the contributions that effective technology management makes to organizational goals and their achievement.
- Apply, integrate, and synthesize competencies gained from technical and management courses to make a strategic contribution to business enterprise.

UNH Manchester

Welcome to the Manchester division of the College of Professional Studies, the university's campus in the heart of the Merrimack Valley. Our mission is to provide the world-class UNH education and degree in the state's business hub.

Here, we capitalize on our location in the revitalized millyard of New Hampshire's largest city. Our campus on the banks of the Merrimack River is a few blocks from the heart of the state's financial and corporate center and home to many of the region's non-profit and government offices. Led by faculty who are experts in their fields, our career-driven programs equip students to succeed in high-demand fields ranging from business to computer science, liberal arts to biotechnology, engineering to language studies.

We are uniquely equipped to support regional economic development, creating a campus environment in which students, faculty, business/industry, government and nonprofits collaborate on mutually beneficial projects and initiatives. As a community partner, we have a commitment to the region's economic vitality, respond to educational and economic opportunities and support innovation and student access to programs designed and delivered for the future.

Bringing together career-driven programs, faculty talent and a focus on experiential learning, the Manchester division of CPS prepares students for success in their chosen field — and connects them to the wealth of opportunities in the region and beyond.

Accreditation

The University of New Hampshire at Manchester was established in 1985 as the sixth undergraduate college of the University of New Hampshire. UNH Manchester merged with Granite State College in 2023 to form the UNH College of Professional Studies, which expands online offerings across UNH and enhances support of online and on campus learners in the state and region. The University of New Hampshire is accredited by the New England Commission of Higher Education (formerly the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges, Inc.), which accredits schools and colleges in the six New England states. Accreditation indicates that the institution has been carefully reviewed and found to meet or exceed standards agreed upon by nationally recognized educators.

Faculty

The Manchester faculty is our greatest asset. Residential faculty members have earned reputations for excellent teaching, scholarly achievement in their fields and service to the community. They are recognized scholars and have acquired national and international reputations for their expertise. Adjunct faculty members bring applied experience and a commitment to teaching to the classroom. Most importantly, our dedicated faculty are not just teachers—they are mentors who are invested in the success of each student.

https://manchester.unh.edu/

Departments

- Applied Engineering and Sciences
- Business and Communication Arts
- Life Sciences
- Security Studies

Programs of Study

- Analytics and Data Science (p. 634)
- ASL/English Interpreting (p. 638)
- Biological Sciences (p. 641)
- Biotechnology (p. 645)
- Business (p. 649)
- Communication Arts (p. 656)
- Computing (p. 668)
- Engineering Technology (p. 672)
- English Studies (p. 676)
- English Teaching (p. 678)
- General Studies (p. 680)
- Homeland Security (p. 681)
- Humanities (p. 686)
- Neuropsychology (p. 687)
- Philosophy (p. 689)
- Psychology (p. 689)
- Public Service and Nonprofit Leadership (p. 692)

Analytics and Data Science

With an explosion of big data initiatives in organizations worldwide, the demand for data-savvy individuals has never been higher. Our Analytics and Data Science program is specifically designed to prepare the next generation of innovative data scientists and analysts.

The Analytics and Data Science program in the Applied Engineering and Sciences Department at UNH Manchester prepare students with cutting-edge technical skills they need to manage, distill, and interpret data for all economic sectors, from finance to healthcare to marketing and advertising. Through experiential learning that include real-world course projects, internship experiences, and capstone courses, students master programming languages and techniques using modern platforms to derive actionable information from data.

Programs

- Analytics and Data Science Major: Analytics Option (B.S.) Manchester (p. 634)
- Analytics and Data Science Major: Data Science Option (B.S.) Manchester (p. 636)
- Analytics Minor (Manchester) (p. 638)
- Data Science Minor (Manchester) (p. 638)

Faculty

Analytics and Data Science Faculty

Analytics and Data Science Major: Analytics Option (B.S.) Manchester

https://manchester.unh.edu/program/bs/analytics-data-science-major-analytics-option

Description

The option in Analytics is intended for students interested in either heading into industry immediately upon graduation, or pursuing graduate

work in a professionally oriented program at UNH. The option in Analytics places its emphasis on applications of data science in industry.

This program has been designed to prepare students for professional careers working with data, with an emphasis on the extraction of meaning from data. The program is not targeted to any one industry; rather, it provides a flexible, practical skillset that can be applied widely. This skillset includes elements of computer science, applied mathematics and statistics, communication skills, and business savvy. During the course of the program, students will demonstrate their acquisition of these skills by successfully completing their program coursework, their internship experience, and their capstone project.

For additional information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Successful completion of the program entails earning at least 128 credits, meeting the requirements of the University's Discovery program, completing all of the 21 required courses in the major as listed below, including the capstone course, the internship preparedness course, and an internship. In all major courses, the minimum allowable grade is a C-. The minimum overall GPA for graduation is 2.0. Transfer students may transfer up to a maximum of 32 credits to satisfy major requirements (not counting those courses used to satisfy Discovery requirements).

Code	Title	Credits
Mathematics		
MATH 425	Calculus I	4
MATH 426	Calculus II	4
MATH 645	Linear Algebra for Applications	4
MATH 739	Applied Regression Analysis	4
Computing		
COMP 424	Applied Computing 1: Foundations of Programming	4
COMP 430	Systems Fundamentals	4
COMP 520	Database Design and Development	4
COMP 525	Data Structures Fundamentals	4
COMP 570	Statistics in Computing and Engineering	4
COMP 625	Data Structures and Algorithms	4
Business		
BUS 400	Introduction to Business	4
BUS 453	Leadership for Managers	4
BUS 620	Organizational Behavior	4
Analytics & DATA Courses		
DATA 557	Introduction to Data Science and Analytics	4
or CS 457	Introduction to Data Science and Analytics	
DATA 674	Predictive and Prescriptive Analytics I	4
DATA 675	Predictive and Prescriptive Analytics II	4
DATA 757	Mining Massive Datasets	4
or COMP 721	Big Data for Data Engineers	
Project and Professional Practice		
DATA 690	Internship Experience	1-4
DATA 790	Capstone Project	4
or CS 791	Senior Project I	
or CS 792	Senior Project II	
Other		
ENGL 502	Professional and Technical Writing	4
UMST 582	Internship and Career Planning Seminar	1
Total Credits		**78-81**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
COMP 424 or CS 415	Applied Computing 1: Foundations of Programming or Introduction to Computer Science I	4
ENGL 401	First-Year Writing	4
MATH 425	Calculus I	4
Discovery Course		4
	Credits	**16**
Spring		
BUS A [1]		4
COMP 525 or CS 416	Data Structures Fundamentals or Introduction to Computer Science II	4
DATA 557 or CS 457	Introduction to Data Science and Analytics or Introduction to Data Science and Analytics	4
MATH 426	Calculus II	4
	Credits	**16**
Second Year		
Fall		
COMP 625 or CS 515	Data Structures and Algorithms or Data Structures and Introduction to Algorithms	4
MATH 645	Linear Algebra for Applications	4
Discovery Course		4
Elective [2]		4
	Credits	**16**
Spring		
COMP 430	Systems Fundamentals	4
COMP 520 or IT 505	Database Design and Development or Integrative Programming	4
COMP 570 or MATH 539 or MATH 644	Statistics in Computing and Engineering or Introduction to Statistical Analysis or Statistics for Engineers and Scientists	4
Discovery Course		4
	Credits	**16**

Third Year		
Fall		
BUS B [1]		4
DATA 674	Predictive and Prescriptive Analytics I	4
MATH 739	Applied Regression Analysis	4
Discovery Course		4
	Credits	**16**
Spring		
DATA 675 or COMP 721	Predictive and Prescriptive Analytics II or Big Data for Data Engineers	4
ENGL 502	Professional and Technical Writing	4
UMST 582	Internship and Career Planning Seminar	1
Discovery Course		4
Discovery Course		4
	Credits	**17**
Fourth Year		
Fall		
BUS C [1]		4
DATA 757	Mining Massive Datasets	4
Discovery Course		4
Elective		4
	Credits	**16**
Spring		
DATA 790 or CS 791 or CS 792	Capstone Project or Senior Project I or Senior Project II	4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**129**

[1] In consultation with your advisor, select: Introduction to Business, Organizational Behavior, or Organizational Leadership.

[2] MATH 531 Mathematical Proof strongly encouraged

Student Learning Outcomes

Analytics and Data Science focuses on the extraction of meaning from data through the application of computer science, mathematics and business domain knowledge. Within a few years of obtaining a bachelor's degree in Analytics and Data Science, our alumni will have:

Program Learning Outcomes

- Engaged in successful career areas of analytics and data science and will already have, or be pursuing, advanced degrees in Analytics, Data Science, Computer Science, Mathematics or related fields.
- Applied the full range of core Data Science concepts and techniques to fill the analytics needs of an organization.
- Communicated effectively with diverse stakeholders as well as functioned appropriately in a team environment.
- Navigated the complex interconnections between data, computing technology, and the goals and constraints of the organization served.
- Understood the pervasive and changing role of data in global society, and participated responsibly as both an Analytics and Data Science professional and citizen.

Analytics and Data Science Major: Data Science Option (B.S.) Manchester

Description

Beginning in the 2025-2026 academic year, the Analytics and Data Science: Data Science Option B.S. major will no longer be accepting new students. Current Analytics and Data Science: Data Science Option students will continue to have access to the same high-quality education and resources until they graduate.

The option in Data Science is intended for students interested in pursuing advanced degrees and conducting original research in data science. The option in data science places its emphasis on a rigorous introduction to the theoretical mathematical and computational underpinnings of modern data science.

During the course of the program, students will demonstrate their acquisition of these skills by successfully completing their program coursework, their internship experience, and their capstone project.

For additional information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Successful completion of the program entails earning at least 128 credits, meeting the requirements of the University's Discovery program, and completing all of the 18 required courses in the major as listed below. In all major courses, the minimum allowable grade is a C-. The minimum overall GPA for graduation is 2.0. Transfer students may transfer up to a maximum of 32 credits to satisfy major requirements (not counting those courses used to satisfy Discovery requirements).

Students who enroll in the Data Science Option may need to take some required courses on the Durham campus.

Code	Title	Credits
Mathematics		
MATH 425	Calculus I	4
MATH 426	Calculus II	4

MATH 528	Multidimensional Calculus	4
MATH 531	Mathematical Proof	4
COMP 570	Statistics in Computing and Engineering	4
MATH 645	Linear Algebra for Applications	4
MATH 755	Probability with Applications	4
MATH 756	Principles of Statistical Inference	4
Computing		
COMP 424	Applied Computing 1: Foundations of Programming	4
or CS 415	Introduction to Computer Science I	
COMP 525	Data Structures Fundamentals	4
or CS 416	Introduction to Computer Science II	
COMP 625	Data Structures and Algorithms	4
or CS 515	Data Structures and Introduction to Algorithms	
CS 420	Foundations of Programming for Digital Systems	4
CS 659	Introduction to the Theory of Computation	4
COMP 740 & MATH 738	Machine Learning Applications and Tools and Data Mining and Predictive Analytics	8
or COMP 740 & DATA 674	Machine Learning Applications and Tools and Predictive and Prescriptive Analytics I	
or DATA 674 & DATA 675	Predictive and Prescriptive Analytics I and Predictive and Prescriptive Analytics II	
CS 758	Algorithms	4
COMP 720	Database Systems and Technologies	4
Analytics & Data Science		
DATA 557	Introduction to Data Science and Analytics	4
English		
ENGL 502	Professional and Technical Writing	4
Analytics Course Capstone		
Select from the following:		4
DATA 790	Capstone Project	
or CS 791 & CS 792	Senior Project I and Senior Project II	
or CS 799	Thesis	
Select Approved Minor [1]		
Total Credits		**80**

[1] Select an approved minor in consultation with the minor supervisor. Must be in a discipline to which Analytics and Data Science can be applied (examples include: Economics, Applied Mathematics) for the Data Science Option.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MATH 425	Calculus I	4
COMP 424 or CS 415	Applied Computing 1: Foundations of Programming or Introduction to Computer Science I	4
ENGL 401	First-Year Writing	4
Discovery Course		4
	Credits	**16**
Spring		
MATH 426	Calculus II	4
COMP 525 or CS 416	Data Structures Fundamentals or Introduction to Computer Science II	4
DATA 557 or CS 457	Introduction to Data Science and Analytics or Introduction to Data Science and Analytics	4
CS 420	Foundations of Programming for Digital Systems	4
	Credits	**16**
Second Year		
Fall		
MATH 645	Linear Algebra for Applications	4
MATH 531	Mathematical Proof	4
COMP 625 or CS 515	Data Structures and Algorithms or Data Structures and Introduction to Algorithms	4
ENGL 502	Professional and Technical Writing	4
	Credits	**16**
Spring		
COMP 570 or MATH 644	Statistics in Computing and Engineering or Statistics for Engineers and Scientists	4
CS 659	Introduction to the Theory of Computation	4
MATH 528	Multidimensional Calculus	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
MATH 755	Probability with Applications	4
MATH 738	Data Mining and Predictive Analytics [1]	4
Minor Course		4
Discovery Course		4
	Credits	**16**
Spring		
MATH 756	Principles of Statistical Inference	4
CS 750	Machine Learning [1]	4
CS 755	Computer Vision	4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
CS 758	Algorithms	4
DATA 790	Capstone Project	4
Minor Course		
Discovery Course		
	Credits	**8**
Spring		
Minor Course		4
Minor Course		4
Minor Course		4
Discovery Course		4
	Credits	**16**
	Total Credits	**120**

[1] Either MATH 738 and CS 750, or DATA 674 and DATA 675, or DATA 674 and CS 750.

Student Learning Outcomes

Analytics and Data Science focuses on the extraction of meaning from data through the application of computer science, mathematics and business domain knowledge. Within a few years of obtaining a bachelor's degree in Analytics and Data Science, our alumni will have:

Program Learning Outcomes

- Engaged in successful career areas of analytics and data science and will already have, or be pursuing, advanced degrees in Analytics, Data Science, Computer Science, Mathematics or related fields
- Applied the full range of core Data Science concepts and techniques to fill the analytics needs of an organization
- Communicated effectively with diverse stakeholders as well as functioned appropriately in a team environment
- Navigated the complex interconnections between data, computing technology, and the goals and constraints of the organization served
- Understood the pervasive and changing role of data in global society, and participated responsibly as both an Analytics and Data Science professional and citizen

Analytics Minor (Manchester)

https://manchester.unh.edu/program/minor/analytics

Description

The demand for data-savvy individuals has never been higher, and the analytics minor gives you an introduction to the tools you'll need for a career involving data science and analytics, focused on the application of data science in industry. In addition to courses in mathematics, computer science and analytics, you can study neural networks and big data. Combine this minor with a major in the sciences, computer science, business, marketing or social sciences to bring enhanced skills to your career or graduate studies. With the experience provided by this minor, you'll gain a competitive advantage in this rapidly growing field. The objective of this minor is to provide a basic background in analytics for those interested in applications of data science.

Requirements

Academic policies related to Minors.

Students must complete five courses (20 credits) with a cumulative minimum grade point average of 2.0 and with no grade below a C- grade.

Transfer course approval for the minor is limited to at most, two relevant courses successfully completed at another accredited institution, subject to syllabi review and approval.

Some preparation in MATH 425 Calculus I and programming COMP 424 Applied Computing 1: Foundations of Programming is required.

Code	Title	Credits
Required Courses		
DATA 557	Introduction to Data Science and Analytics	4
COMP 525	Data Structures Fundamentals	4
COMP 570	Statistics in Computing and Engineering	4
MATH 645	Linear Algebra for Applications	4
Select one course from the following:		4
DATA 674	Predictive and Prescriptive Analytics I	
DATA 675	Predictive and Prescriptive Analytics II	
DATA 750	Neural Networks	
DATA 757	Mining Massive Datasets	
Total Credits		**20**

Data Science Minor (Manchester)

https://manchester.unh.edu/program/minor/data-science

Description

The objective of this minor is to provide a basic background in data science for those who are more interested in the theoretical underpinnings of analytics and data science.

Requirements

Academic policies related to Minors.

Students must complete five courses (20 credits) with a cumulative minimum grade point average of 2.0 and with no grade below a C- grade.

Transfer course approval for the minor is limited to at most, two relevant courses successfully completed at another accredited institution, subject to syllabi review and approval.

Some preparation in MATH 425 Calculus I and programming (COMP 424 Applied Computing 1: Foundations of Programming or CS 415 Introduction to Computer Science I) is required.

Code	Title	Credits
Required Courses		
CS 515	Data Structures and Introduction to Algorithms	4
Select one course from the following:		4
COMP 525	Data Structures Fundamentals	
CS 416	Introduction to Computer Science II	
Select three courses from the following: [1]		12
CS 730	Introduction to Artificial Intelligence	
CS 750	Machine Learning	
CS 753	Information Retrieval and Generation Systems	
CS 775	Database Systems	
MATH 645	Linear Algebra for Applications	
MATH 736	Advanced Statistical Modeling	
MATH 738	Data Mining and Predictive Analytics	
MATH 739	Applied Regression Analysis	
DATA 750	Neural Networks	
DATA 757	Mining Massive Datasets	
Total Credits		**20**

[1] Must select at least one CS and one MATH course. Must select CS 750 Machine Learning or MATH 738 Data Mining and Predictive Analytics.

ASL/English Interpreting

Preparing skillful interpreters through interaction and immersion

In the nation's first accredited interpreting program and one of only 15 accredited programs in the country, you'll learn American Sign Language and the foundation of ASL/English interpreting from distinguished faculty, all of whom are native ASL signers and/or certified interpreters.

The demand for skilled interpreters is on the rise, with the Bureau of Labor Statistics projecting 18 percent growth in the interpreting field between 2016 and 2026. Our program prepares you to work with the Deaf community by teaching you the intricacies of American Sign Language and Deaf culture, as well as the skills you need to pursue a career as an ASL/English interpreter.

Members of the Deaf community are integrated with students into the learning experience, both inside and outside the classroom, which is a very unique feature of our ASL/English Interpreting program. During your senior year internship, you will be paired with a nationally certified mentor and use your interpretation and ASL skills throughout the state.

Our graduates have pursued careers in ASL/English interpreting, deaf education, rehabilitation, healthcare, audiology, social work, counseling and the media. From medicine to law, education to performing arts — your career opportunities as a bilingual and bicultural graduate are vast.

Programs

- American Sign Language and Deaf Studies Minor (p. 639)
- ASL/English Interpreting Major (B.S.) (p. 639)

Faculty

ASL/English Interpreting Faculty

American Sign Language and Deaf Studies Minor

https://manchester.unh.edu/program/minor/american-sign-language-deaf-studies

Description

American Sign Language is a visual language that is predominately used by Deaf and hard of hearing communities in the United States and many parts of Canada. Developing fluency in American Sign Language and expertise in the community and culture provides a foundation for careers that work with the American Deaf community.

Requirements

Academic policies related to Minors.

To earn a minor in American Sign Language and Deaf Studies, students must complete 24 credits, with no individual grade lower than C-.

Code	Title	Credits
Required Courses		
ASL 435	American Sign Language I	4
ASL 436	American Sign Language II	4
INTR 438	A Socio-cultural Perspective on the Deaf Community	4
Electives		
Select three courses from the following:		12
ASL 531	American Sign Language III	
ASL 532	American Sign Language IV	
ASL 621	Advanced American Sign Language Discourse I	
ASL 622	Advanced American Sign Language Discourse II	
INTR 539	Comparative Linguistic Analysis for Interpreters	
Total Credits		**24**

ASL/English Interpreting Major (B.S.)

https://manchester.unh.edu/program/bs/aslenglish-interpreting-major

Description

The American Sign Language (ASL)/English Interpreting program at UNH Manchester is a specialized, in-depth program with a national reputation for quality. In 1999, the program became the first interpreting program in the country to be found in compliance with the National Interpreter Education Standards of the Conference of Interpreter Trainers (CIT). In 2007, the program became the first interpreting program in the nation to be accredited by the Commission on Collegiate Interpreter Education (CCIE), and, in 2017, the program became the first program to be re-accredited by CCIE. UNH Manchester also houses one of northern New England's most comprehensive collections of books and media materials on ASL/English Interpreting.

The program is guided by the premise that deaf people, as a linguistic minority, possess their own cultural values, literature, history, traditions, and social conventions. Interpretation requires bilingual and bicultural competence in spoken English and American Sign Language. The ASL/English Interpreting program at UNH Manchester provides students with a strong theoretical foundation as generalists in ASL/English Interpreting and helps prepare students for either state-level interpreter screening or national Registry of Interpreters for the Deaf (RID) interpreter certification, depending on students' skill level and experience.

Graduates may go on to pursue specialty areas in interpretation or related fields of study.

Students who complete the bachelor of science degree in ASL/English Interpreting graduate with a varied and flexible academic base. Interpreting requires skills such as sustained powers of concentration, versatility in dealing with a variety of people and content areas, fast-thinking and excellent communication skills in the respective languages. Students seeking to become interpreters receive a foundation in American Sign Language, Deaf culture, and the interpreting process, and their programs of study often include elective courses examining specific specialized settings such as Healthcare or on special topics such as theater and translation. Students also gain a thorough grounding in the liberal arts through the University's Discovery program.

Graduates of the ASL/English Interpreting program may pursue careers in ASL/English interpreting, deaf education, rehabilitation, health care, audiology, social work, counseling, and the media. The program provides students with a varied and flexible academic base. Graduates are prepared for further study in such fields as psychology, communication, linguistics, sociology, and anthropology.

For more information, the UNH Manchester Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Students must complete 64 credits in the major, 40 credits in the University's Discovery program, and 24 credits in elective courses.
- Students must complete 64 credits in the major with a grade of C or better. Students who earn less than a C on a particular course may repeat that course only once.
- Students must achieve a GPA of 2.5 or better in major courses and must pass both ASL 532 and INTR 630 with at least a B- (or successfully demonstrate competence in American Sign Language and consecutive interpretation, respectively).
- Transfer students must complete a minimum of eight ASL/English Interpreting courses at UNH Manchester.

Code	Title	Credits
Language Courses		
ASL 435	American Sign Language I	4
ASL 436	American Sign Language II	4
ASL 531	American Sign Language III	4
ASL 532	American Sign Language IV	4
ASL 621	Advanced American Sign Language Discourse I	4
ASL 622	Advanced American Sign Language Discourse II	4
Culture and Linguistics Courses		
INTR 438	A Socio-cultural Perspective on the Deaf Community [1]	4
INTR 539	Comparative Linguistic Analysis for Interpreters	4
Interpreting Courses		
INTR 430	Introduction to Interpretation	4
INTR 439	Ethics and Professional Standards for Interpreters	4
INTR 540	Translation	4
INTR 630	Consecutive Interpretation I	4
INTR 636	Consecutive Interpretation II	4
INTR 732	Simultaneous Interpretation	4
INTR 734	Field Experience and Seminar I	4
INTR 735	Field Experience and Seminar II	4
Total Credits		**64**

[1] ASL/English Interpreting majors cannot use this course to fulfill the SS Discovery Program requirement.

Capstone Experience

The capstone experience in the bachelor of science degree program in ASL/English Interpreting is met by INTR 735 Field Experience and Seminar II, which is a senior-level course and the last in the sequence of courses required for the major. In addition, students participate in a research experience. Starting in INTR 636 Consecutive Interpretation II and continuing in INTR 732 Simultaneous Interpretation, students identify an area of interest, conduct a literature review, and design and complete a research project. At the end of INTR 732, students submit a completed paper and present on their findings. These courses meet the following two criteria of the capstone experience for this major:

1. the capstone synthesizes and applies disciplinary knowledge and skills
2. the capstone demonstrates emerging professional competencies.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ASL 435	American Sign Language I	4
ENGL 401	First-Year Writing	4
INTR 438	A Socio-cultural Perspective on the Deaf Community	4
UMST 401	First Year Seminar	2
Discovery Course		4
	Credits	**18**
Spring		
ASL 436	American Sign Language II	4
INTR 430	Introduction to Interpretation	4
Discovery Course		4
Quantitative Reasoning Course		4
	Credits	**16**
Second Year		
Fall		
ASL 531	American Sign Language III	4
INTR 439	Ethics and Professional Standards for Interpreters	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
ASL 532	American Sign Language IV	4
INTR 540	Translation	4
INTR 539	Comparative Linguistic Analysis for Interpreters	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
ASL 621	Advanced American Sign Language Discourse I	4
INTR 630	Consecutive Interpretation I	4
Discovery Course		4
Elective Course		4
	Credits	**16**
Spring		
ASL 622	Advanced American Sign Language Discourse II	4
INTR 636	Consecutive Interpretation II	4

Discovery Course		4
Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
INTR 732	Simultaneous Interpretation	4
INTR 734	Field Experience and Seminar I	4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
INTR 735	Field Experience and Seminar II	4
Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**130**

Student Learning Outcomes

Program Learning Outcomes

- Development of language competency in both American Sign Language and English to foster entry into the field of interpreting.
- Development of competencies needed for meaning transfer.
- Development of skills for self-assessment for process and product of interpreting.
- Development of decision-making skills and critical thinking to assess an interpreted situation and the source language, target language, setting and participants.

Biological Sciences

Explore the living world through hands-on experience in the lab and in the field

Discover the inner workings of living organisms from molecules to ecosystems in our Biological Sciences program. As our largest and most popular major, the Biological Sciences program is designed to give you the degree you want — through self-designed concentrations, independent study, research projects, internships, job shadows, study abroad, and more.

You'll work with faculty mentors to customize your degree around your interests, allowing you to focus your learning in these diverse areas of study:

- Biology Teaching
- Biomaterials
- Cancer biology
- Ecology
- Genomics
- Microbiology
- Pre-Professional Health (Dental, Medical, Optometry, Pharmacy, Physician Assistant, Physical/Occupational Therapy, Veterinary, etc.)

All students, in consultation with their advisor, develop a self-designed concentration where they select a group of upper-level courses that represents their interest.

Research is central to this program, empowering you to explore, question and invent. Side-by-side with your classmates and professors, you'll conduct experiments in our state-of-the-art labs: general biology, advanced biology, microbiology, general chemistry and organic chemistry, as well as the cell culture research lab, microbiology research lab, and molecular biology research lab.

You'll also have the opportunity to apply your skills in the real world through experiential learning, including:

- robust job shadows at the Elliot Hospital Laboratory and other local medical facilities
- internships at Manchester Water Works, ARMI (Advanced Regenerative Manufacturing Institute), and biotechnology firms on campus in our Biotechnology Innovation Center as well as in the nearby Millyard
- summer research courses at Shoals Marine Laboratory
- study away opportunities such as investigating biological diversity in Costa Rica or microbial ecology in Iceland

Through diverse areas of study, faculty experts and hands-on experience, you'll be prepared for success in graduate, medical or professional studies, and careers in industries from healthcare to agriculture to education.

Programs

- Biological Sciences (A.S.) (p. 641)
- Biological Sciences Major (B.A.) (p. 643)
- Biological Sciences Minor (p. 645)

Faculty

Biological Sciences Faculty

Biological Sciences (A.S.)

https://manchester.unh.edu/program/as/biological-sciences

Description

Biology is the study of living organisms in both laboratory and field conditions. It concerns itself with questions of understanding the living world, its complex interrelationships, and the role of human beings within it.

The associate of science in biological sciences program at UNH Manchester is designed to serve either as a terminal degree or as a springboard for students interested in the life sciences, which include majors in biology, biotechnology, microbiology, zoology, plant biology, wildlife management, environmental conservation, biochemistry, and animal sciences. Employment opportunities in the public and private sectors include education; food, water, wastewater and other industrial laboratories; clinical laboratories; biotechnology; environmental research and monitoring; and health careers.

For more information, contact the Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 64 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students must complete a minimum of 64 credits to graduate. There are two tracks in the A.S. degree program at UNH Manchester: biology and microbiology.

Biology Track Requirements

Code	Title	Credits
MATH 425	Calculus I	4
or MATH 424B	Calculus for Life Sciences	
PSYC 402	Statistics in Psychology [1]	4
BIOL 413	Principles of Biology I	4
BIOL 414	Principles of Biology II	4
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
BIOL 541W	Ecology	4
GEN 604	Principles of Genetics	4
Total Credits		**47**

[1] Other statistics courses such as BIOL 528 Applied Biostatistics I or BUS 430 Introduction to Business Statistics may be used to satisfy this requirement.

Microbiology Track Requirements

Students opting for the microbiology track must complete all courses listed in the biological sciences program with the exception of BIOL 541W Ecology. In addition, students must complete the following courses. From time to time, other microbiology courses may be offered. With approval of the Program Coordinator, they may substitute for courses within the Microbiology Track.

Code	Title	Credits
BMS 602 & BMS 603	Pathogenic Microbiology and Pathogenic Microbiology Laboratory	5
Total Credits		**5**

Note: Students preparing for professional or graduate programs may need to complete: CHEM 651 Organic Chemistry I/CHEM 653 Organic Chemistry Laboratory and CHEM 652 Organic Chemistry II/CHEM 654 Organic Chemistry Laboratory. These courses may substitute for CHEM 545 Organic Chemistry/CHEM 546 Organic Chemistry Laboratory and BMCB 658 General Biochemistry/BMCB 659 General Biochemistry Lab. Please consult your academic advisor.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
BIOL 413	Principles of Biology I	4
CHEM 403	General Chemistry I	4
Discovery Course		4
	Credits	**17-18**
Spring		
MATH 425	Calculus I	4
BIOL 414	Principles of Biology II	4
CHEM 404	General Chemistry II	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
PSYC 402	Statistics in Psychology	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BIOL 541W	Ecology	4
HUMA 411 or HUMA 412	Humanities I or Humanities II	4
	Credits	**17**
Spring		
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
GEN 604	Principles of Genetics	4
Discovery Course		4
	Credits	**18**
	Total Credits	**68-69**

Student Learning Outcomes

Program Learning Outcomes

A student successfully completing the Biological Sciences program will be able to:

- Understand the fundamentals of basic biological principles, concepts, and theories.

- Demonstrate the ability to evaluate, apply, and synthesize biological information and ideas.
- Be competent in basic biology and chemistry laboratory skills and with the use of common laboratory equipment and instrumentation.
- Demonstrate the ability to communicate technical information related to biological sciences related topics in scientific writing and oral presentations.
- Understand, analyze, and evaluate primary research literature involving biological sciences related topics.
- Understand and apply the process of the scientific method, including being able to formulate hypotheses, design and conduct experiments with adequate controls to test hypotheses, interpret and evaluate data, and draw conclusions.
- Gather, analyze, organize, evaluate, and present scientific data, including the use of technology to solve problems and communicate information.
- Demonstrate the ability to function as a member of a team.
- Compete effectively for entry-level employment and for admission to baccalaureate schools in their chosen area and be successful in these endeavors.

Biological Sciences Major (B.A.)

https://manchester.unh.edu/program/ba/biological-sciences-major

Description

Biology is the study of living organisms in both laboratory and field conditions. It concerns itself with questions of understanding the living world, its complex interrelationships, and the role of human beings within it.

The B.A. in biological sciences at UNH Manchester is designed to:

- allow students to earn a baccalaureate degree in biology at UNH Manchester;
- allow students to combine study in biology with other programs and disciplines by completing a second major, a minor, or a self-designed set of elective courses along with their biology degree;
- provide an opportunity for students to complete a baccalaureate degree in biology while preparing to pursue a Master's degree in biology, biotechnology, or other fields. These degree programs could be undertaken after completion of the B.A. Alternatively, UNH offers several accelerated Master's programs where excellent senior students in the Biological Sciences major can complete coursework towards their undergraduate and graduate degrees at the same time;
- allow students to complete a major in biology while taking required courses in education in preparation for the five-year M.A.T. or M.Ed. programs and state certification in secondary science education; or alternative state certification pathway;
- provide an opportunity for students to complete a baccalaureate degree in biology while completing the required courses for admission to medical, dental, veterinary, physician assistant, pharmacy, physical therapy, optometry, and other professional or graduate programs.

Employment opportunities in the public and private sectors include education; industrial, clinical, and research laboratories; biotechnology; and environmental field research.

For more information, contact the Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Each course required in the major must be completed with a minimum grade of C-. Students must attain a minimum GPA in the major of 2.0. Transfer students must complete at least 24 credits in the major at UNH. BIOL 413 Principles of Biology I, BIOL 414 Principles of Biology II may be used to satisfy the biological sciences Discovery requirement and CHEM 403 General Chemistry I, CHEM 404 General Chemistry II may be used to satisfy the Physical Sciences Discovery requirement. PSYC 402 Statistics in Psychology may be used to satisfy the Quantitative Reasoning Discovery requirement; however, students interested in graduate or professional programs are encouraged to take MATH 425 Calculus I, or MATH 424B Calculus for Life Sciences, to satisfy the Quantitative Reasoning requirement.

The UNH Manchester B.A. in biological sciences program is structured with three levels of coursework.

Code	Title	Credits
Biology Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
or BIOL 413	Principles of Biology I	
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
or BIOL 414	Principles of Biology II	
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BSCI 505	Biosciences Sophomore-Junior Seminar	2
BIOL 541W	Ecology	4
GEN 604	Principles of Genetics	4
Chemistry Courses		
CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	8
Mathematics Courses		
Select one of the following:		4
MATH 418	Analysis and Applications of Functions	
MATH 425	Calculus I	
MATH 424B	Calculus for Life Sciences	
Statistics Course		
PSYC 402	Statistics in Psychology	4
or BIOL 528	Applied Biostatistics I	
or BUS 430	Introduction to Business Statistics	
Total Credits		**39**

Self-Designed Concentration in Biology

Students will select, in consultation with their advisor, four biology courses at the 600-700 level to be taken at UNH Manchester or UNH Durham.

Capstone Experience

Code	Title	Credits
BSCI 701	Senior Seminar I (during either semester of senior year) [1]	1
In consultation with your academic advisor, select a capstone experience:		4
BSCI 792	Research	
BSCI 793	Internship	
BSCI 795	Independent Study	
Total Credits		**5**

[1] BSCI 701 will meet weekly during either semester of the senior year in a seminar format. Students will share information about capstone experiences, listen to presentations on timely issues in biology, develop career preparation skills, and receive training in poster production. Other methods of oral presentation and scientific writing are explored as students prepare to present the results of their capstone activities at the Undergraduate Research Conference or other venues.

In addition, all students will take elective courses to fulfill the 128-credit requirement for a B.A. degree. These elective courses could fulfill the requirements for a major or minor in another program or they could fulfill a self-designed interdisciplinary concentration. Where appropriate, a student could include some of the biology-related supporting science courses listed above. These courses would be selected in consultation with the advisor and the appropriate faculty advisor in another program.

Depending on specific academic and career goals, in particular, students preparing for professional or graduate programs, may, in consultation with their advisor, elect to take additional supporting science courses such as:

Code	Title	Credits
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory (one semester)	5
CHEM 651 & CHEM 653	Organic Chemistry I and Organic Chemistry Laboratory (two semesters)	5
CHEM 652 & CHEM 654	Organic Chemistry II and Organic Chemistry Laboratory (two semesters)	5
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
MATH 426	Calculus II	4
PHYS 401	Introduction to Physics I	4
PHYS 402	Introduction to Physics II	4

These courses are often required for admission to medical, professional, and other graduate programs. Medical and dental graduate schools also require PSYC 401 Introduction to Psychology and SOC 400 Introductory Sociology.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
BIOL 413	Principles of Biology I	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing	4
MATH 418	Analysis and Applications of Functions	4
UMST 401	First Year Seminar	2
	Credits	**18**
Spring		
BIOL 414	Principles of Biology II	4
CHEM 404	General Chemistry II	4
PSYC 402	Statistics in Psychology	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
BIOL 541W	Ecology	4
Foreign Language I		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
BSCI 505	Biosciences Sophomore-Junior Seminar	2
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
GEN 604	Principles of Genetics	4
Foreign Language II		4
Discovery Course		4
	Credits	**19**
Third Year		
Fall		
600/700 Biological Concentration		4
Discovery Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
600/700 Biological Concentration		4
Discovery Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
600/700 Biological Concentration		4
Capstone		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
600/700 Biological Concentration		4
BSCI 701	Senior Seminar I	1

Elective Course	4
Elective Course	4
Elective Course	1
Credits	**14**
Total Credits	**131**

Student Learning Outcomes

Program Learning Outcomes

A student successfully completing the Biological Sciences program will be able to:

- Understand the fundamentals of basic biological principles, concepts, and theories.
- Demonstrate the ability to evaluate, apply, and synthesize biological information and ideas.
- Be competent in basic biology and chemistry laboratory skills and with the use of common laboratory equipment and instrumentation.
- Demonstrate the ability to communicate technical information related to biological sciences related topics in scientific writing and oral presentations.
- Understand, analyze, and evaluate primary research literature involving biological sciences related topics.
- Understand and apply the process of the scientific method, including being able to formulate hypotheses, design and conduct experiments with adequate controls to test hypotheses, interpret and evaluate data, and draw conclusions.
- Gather, analyze, organize, evaluate, and present scientific data, including the use of technology to solve problems and communicate information.
- Demonstrate the ability to function as a member of a team.
- Compete effectively for entry-level employment and for admission to graduate or professional schools in their chosen area and be successful in these endeavors.

Biological Sciences Minor

https://manchester.unh.edu/program/minor/biological-sciences

Description

The minor in biological sciences introduces students to the field of biological sciences in a five-course sequence that will provide substantial education and training in scientific concepts, science communication and laboratory skills, as well as the central content areas of biology, including biomolecules, cell biology, genetics, physiology, ecology and evolution. The biological sciences minor is a valuable credential to any major, indicating a substantial additional skillset in the biosciences.

To ensure a course counts in the minor, it is required that students consult the minor coordinator, Dr. Patricia Halpin, (Patricia.Halpin@unh.edu) before enrolling in the course.

Requirements

Academic policies related to Minors.

The minor requires students to complete five courses (20-21 credits, depending on the courses chosen). The minimum acceptable grade in these courses is a C-, and the average grade for these courses must be a C or better.

Courses for non-majors (for example, BMS 507 Human Anatomy and Physiology I/BMS 508 Human Anatomy and Physiology II; BIOT 422 , BSCI 410 Contemporary Health Issues, BSCI 421 , BSCI 432 Medical Terminology; BIOL 520 Our Changing Planet) will not count towards the minor.

Students are advised that to take some upper-level courses; BMS 503 General Microbiology/BMS 504 General Microbiology Laboratory and GEN 604 Principles of Genetics are frequently prerequisite courses.

Code	Title	Credits
Required courses		
Select one of the following		8
BIOL 411 & BIOL 412	Introductory Biology: Molecular and Cellular and Introductory Biology: Evolution, Biodiversity and Ecology	
BIOL 413 & BIOL 414	Principles of Biology I and Principles of Biology II	
Select one of the following		4-5
BIOL 541W	Ecology	
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	
GEN 604	Principles of Genetics	
Select two courses [1]		8
Total Credits		**20-21**

[1] Must be majors-level courses in the biological sciences

Biotechnology

Channeling scientific curiosity to fuel discovery and innovation

You're a scientist at heart — curious about how everything works, right down to the smallest detail. Exploring topics like biochemistry, molecular biology and genetics, our Biotechnology program puts you at the heart of one of the newest and fastest-growing scientific fields.

Whatever your scientific passion, studying biotechnology can bring you to its doorstep — preparing you to create advancements that can change lives and improve the world around you.

You'll work with faculty mentors to customize your biotechnology degree around your interests, allowing you to focus your learning in these diverse areas of study:

- Biomaterials
- Cancer biology
- Cell Biology
- Microscopy and Bioimaging
- Genomics
- Microbiology
- Stem Cells
- Biotechnology Teaching
- Biotechnology Entrepreneurship
- Pre-Professional Health (Dental, Medical, Optometry, Pharmacy, Physician Assistant, Physical/Occupational Therapy, Veterinary, etc.)

All students, in consultation with their advisor, develop a customized educational plan from a suite of upper-level courses to develop their skills and experience in areas of their interest.

Research is central to this program, empowering you to explore, question and invent, in the classroom and outside the classroom. Side-by-side with your classmates and professors, you'll conduct experiments in our state-of-the-art labs: general biology, advanced biology, microbiology, general chemistry and organic chemistry, as well as the cell culture research lab, microbiology research lab, and molecular biology research lab.

You'll also have the opportunity to apply your skills in the real world through experiential learning, including:

- internships at Manchester Water Works, ARMI (Advanced Regenerative Manufacturing Institute), and biotechnology firms on campus in our Biotechnology Innovation Center as well as in the nearby Millyard
- robust job shadows at the Elliot Hospital Laboratory and other local medical facilities
- research fellowships and placements on campus and off through UNH's Hamel Center for Undergraduate Research and New Hampshire's IDeA Networks of Biomedical Research Excellence program (funded by the National Institutes of Health)
- summer research courses at Shoals Marine Laboratory
- study away opportunities such as investigating biological diversity in Costa Rica or microbial ecology and geology in Iceland

Through in-depth and hands-on training in lab techniques, advanced microbiology, and cell biology, with faculty experts and great facilities, you'll be prepared for success in graduate, medical or professional studies, and careers in industries from biotech to healthcare to education.

Programs

- Biotechnology Major (B.S.) (p. 646)
- Biotechnology Minor (p. 648)

Faculty

Biotechnology Faculty

Biotechnology Major (B.S.)

https://manchester.unh.edu/program/bs/biotechnology-major

Description

Biotechnology is the use of living organisms, biological systems, and small chemicals and biomolecules in technology. Biotechnology has applications in the treatment of diseases, the production of food, the protection of ecosystems, and the generation of energy, as well as in the basic science study of many biological questions.

The B.S. in biotechnology at UNH Manchester is designed to:

- allow students to earn a baccalaureate degree in biotechnology at UNH;
- allow students to combine study in biotechnology with other programs and disciplines by completing a minor, or a self-designed set of elective courses along with their biotechnology degree;
- provide an opportunity for students to complete a baccalaureate degree in biotechnology while preparing to pursue a Master's degree in biology, biotechnology, or other fields. These degree programs could be undertaken after completion of the B.S. Alternatively, UNH offers several accelerated Master's programs where excellent senior students in the Biological Sciences major can complete coursework towards their undergraduate and graduate degrees at the same time;
- allow students to complete a major in biotechnology while taking required courses in education in preparation for the five-year M.A.T. or M.Ed. programs and state certification in secondary science education; or alternative state certification pathway;
- provide an opportunity for students to complete a baccalaureate degree in biotechnology while completing the required courses for admission to medical, dental, veterinary, physician assistant, pharmacy, physical therapy, optometry, and other professional or graduate programs.
- allow students to complete a baccalaureate degree in biotechnology while completing the required courses for admission to graduate research programs (M.S. or Ph.D.) in the life sciences and related fields.

Employment opportunities in the public and private sectors include biotechnology research, development, and manufacturing; education; research laboratories; clinical laboratories; forensic laboratories; jobs in diverse areas from research to quality control to sales in the pharmaceutical industry; industrial positions in the food industry; water and wastewater laboratories and facilities; and environmental research and monitoring.

For more information, contact the Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Courses required in the major must be completed with a minimum grade of C-. Students must attain a minimum GPA in the major of 2.0.
- Transfer students must complete at least 24 credits in the major at UNH.
- BIOL 413 Principles of Biology I, BIOL 414 Principles of Biology II may be used to satisfy the biological sciences Discovery Program requirement.

- CHEM 403 General Chemistry I, CHEM 404 General Chemistry II may be used to satisfy the Physical Sciences Discovery Program requirement.
- PSYC 402 Statistics in Psychology or MATH 424B Calculus for Life Sciences/MATH 425 Calculus I may be used to satisfy the Quantitative Reasoning Discovery Program requirement.
- The UNH Manchester B.S. in biotechnology program is structured with three levels of coursework.

Code	Title	Credits
Core Courses		
BIOL 411	Introductory Biology: Molecular and Cellular	4
or BIOL 413	Principles of Biology I	
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
or BIOL 414	Principles of Biology II	
BIOT 501	Ethical Issues in Biology	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	8
CHEM 651 & CHEM 653	Organic Chemistry I and Organic Chemistry Laboratory	5
CHEM 652 & CHEM 654	Organic Chemistry II and Organic Chemistry Laboratory	5
GEN 604	Principles of Genetics	4
MATH 424B	Calculus for Life Sciences	4
or MATH 425	Calculus I	
PHYS 401	Introduction to Physics I	4
or PHYS 407	General Physics I	
PSYC 402	Statistics in Psychology	4
Advanced Biology Courses (600/700 level)		
Select five courses (at least one course from each of the three categories)		20
I. Advanced Biology courses		
BMS 702	Endocrinology	
BMS 705	Immunology [1]	
or BMS 705 & BMS 715	Immunology and Immunology Laboratory	
BSCI 620	Global Science Exploration	
BSCI 670	Clinical Pathophysiology	
BSCI 680	Pharmacology	
BSCI 695	Exploring Biology Teaching (1-4 credits)	
BSCI 735		
BSCI 750	Cancer Biology: From Benchtop Research to Therapeutic Interventions	
GEN 711	Genomics and Bioinformatics	
or GEN 711W	Genomics and Bioinformatics	
GEN 714	Personal Genomics	
GEN 771	Molecular Genetics	
II. Laboratory Techniques courses		
BIOT 766	Protein and Immunologic Techniques Lab	
BIOT 777	Molecular Biology and Biotechnology Lab	
BMCB 753	Cell Culture	
CHBE 651	Biotech Experience/Biomanufacturing (BTEC 220 GBCC)	
ZOOL 625 & ZOOL 626W	Principles of Animal Physiology and Animal Physiology Laboratory	
III. Advanced Microbiology courses		
BMS 602 & BMS 603	Pathogenic Microbiology and Pathogenic Microbiology Laboratory	
BMS 706 & BMS 708	Virology and Virology Laboratory	
BSCI 737	Microbial Genomics and Biotechnology Lab	
BSCI 740	Aquatic Microbiology	
Total Credits		**76**

[1] BMS 705 Immunology, may optionally be taken with or without BMS 715 Immunology Laboratory.

Depending on their specific academic and career goals and in consultation with their advisor, students may elect to take additional supporting science courses and a full year of physics (e.g., take PHYS 402 Introduction to Physics II in addition to PHYS 401 Introduction to Physics I; or PHYS 408 General Physics II in addition to PHYS 407 General Physics I). These courses are often required for admission to medical, veterinary, and other professional and graduate programs.

Code	Title	Credits
Capstone Experience		
BSCI 701	Senior Seminar I (during either semester of the senior year)	1
Select a capstone experience:		4
BSCI 792	Research	
BSCI 793	Internship	
BSCI 795	Independent Study	
Total Credits		**5**

BSCI 701 Senior Seminar I will meet weekly during either semester of the senior year in a seminar format. Students will share information about capstone experiences, listen to presentations on timely issues in biology, develop career preparation skills, and receive training in poster production. Other methods of oral presentation and scientific writing are explored as students prepare to present the results of their capstone activities at the Undergraduate Research Conference or other venues.

In addition, all students will take elective courses to fulfill the 128-credit requirement for a B.S. degree. These elective courses could fulfill the requirements for a major or minor in another program or they could fulfill a self-designed interdisciplinary concentration. These courses would be selected in consultation with their advisor.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
BIOL 413	Principles of Biology I	4
CHEM 403	General Chemistry I	4
ENGL 401	First-Year Writing	4
MATH 425	Calculus I	4
UMST 401	First Year Seminar	2
	Credits	**18**
Spring		
BIOL 414	Principles of Biology II	4
CHEM 404	General Chemistry II	4
PSYC 402	Statistics in Psychology	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
BIOT 501	Ethical Issues in Biology	4
CHEM 651 & CHEM 653	Organic Chemistry I and Organic Chemistry Laboratory	5
Discovery Course		4

Discovery Course		4
	Credits	**17**
Spring		
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
CHEM 652 & CHEM 654	Organic Chemistry II and Organic Chemistry Laboratory	5
GEN 604	Principles of Genetics	4
Discovery Course		4
	Credits	**18**
Third Year		
Fall		
600/700 Biotechnology Concentration		4
PHYS 401	Introduction to Physics I	4
Discovery Course		4
Elective Course		4
	Credits	**16**
Spring		
600/700 Biotechnology Concentration		4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
Discovery Course		4
Elective Course		4
	Credits	**17**
Fourth Year		
Fall		
600/700 Biotechnology Concentration		4
600/700 Biotechnology Concentration		4
Capstone		4
Elective Course		4
	Credits	**16**
Spring		
600/700 Biotechnology Concentration		4
BSCI 701	Senior Seminar I	1
Elective Course		4
Elective Course		4
	Credits	**13**
	Total Credits	**131**

Student Learning Outcomes

Program Learning Outcomes

A student successfully completing the Biotechnology program will be able to:

- Understand the fundamentals of basic biological principles, concepts, and theories.
- Demonstrate the ability to evaluate, apply, and synthesize biological information and ideas.
- Be competent in basic biology and chemistry laboratory skills and with the use of common laboratory equipment and instrumentation.
- Be competent in advanced laboratory techniques and microbiological methods.
- Understand the professional and ethical responsibilities involved with current and emerging topics in biology.
- Demonstrate the ability to communicate technical information related to biological sciences and biotechnology related topics in scientific writing and oral presentations.
- Understand, analyze, and evaluate primary research literature involving biological sciences and biotechnology related topics.
- Understand and apply the process of the scientific method, including being able to formulate hypotheses, design and conduct experiments with adequate controls to test hypotheses, interpret and evaluate data, and draw conclusions.
- Gather, analyze, organize, evaluate, and present scientific data, including the use of technology to solve problems and communicate information.
- Demonstrate the ability to function as a member of a team.
- Understand current and emerging topics in biotechnology.
- Compete effectively for entry-level biotechnology industry employment and for admission to graduate or professional schools in their chosen area and be successful in these endeavors.

Biotechnology Minor

https://manchester.unh.edu/program/minor/biotechnology

Description

The Minor in Biotechnology will introduce students to the field of biotechnology in a five-course sequence that will provide substantial education and training in bioethics, as well as the central content areas of biology and biotechnology, with a focus on genetics and laboratory techniques. Students adding the biotechnology minor will be adding a valuable credential to their major, indicating a substantial additional skill set in the laboratory-focused and dynamic field of biotechnology.

To ensure a course counts toward the minor, it is required that students consult the minor coordinator, before enrolling in the course.

Requirements

Students must complete five courses (20-21 credits, depending on the courses chosen). The minimum acceptable grade in these courses is a C-, and the average grade for these courses must be a C or better. Transfer course approval for the minor is limited to, at most, two relevant courses successfully completed at another accredited institution, subject to syllabi review and approval. Courses for non-majors will not count towards the minor.

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
BIOT 501	Ethical Issues in Biology	4
GEN 604	Principles of Genetics [1, 3]	4
Biotechnology lab techniques course [1, 2]		**4-5**
Select one of the following:		8
BIOL 411 & BIOL 412	Introductory Biology: Molecular and Cellular and Introductory Biology: Evolution, Biodiversity and Ecology	
or BIOL 413 & BIOL 414	Principles of Biology I and Principles of Biology II	
Total Credits		**20-21**

[1] Biotechnology majors-level course.
[2] BMS 503 General Microbiology/BMS 504 General Microbiology Laboratory may be an additional pre-requisite course.
[3] Students in majors with 3+ course overlap (e.g., Neuropsychology) will need a different course than GEN 604 Principles of Genetics within the Biotechnology major. BMS 503 General Microbiology/BMS 504 General Microbiology Laboratory is a recommended alternative.

Business

Leadership Through Innovation, Collaboration and Real-World Experience.

Located in the economic heart of New Hampshire, our Business program gives you the skills, resources and connections to become a successful, innovative leader. Small class sizes offer you individualized attention from faculty, while our vast network of business partners gets you the practical experience employers want. Courses include a focus on learning sought-after business skills such as the use of Microsoft Office Suite and data analytics tools.

Our faculty members bring years of industry experience to the classroom, and this approach means you'll apply concepts and theories to real, hands-on work. Senior capstone experience brings your learning to life through: an internship or project at a local business, case studies, business ethics study, and developing your professional self. Another internship is required to be taken junior or senior year to support career decision-making.

This highly interdisciplinary program is designed to explore your interests and prepare you for a lucrative career, offering areas of focus in:

- accounting & finance
- business economics
- data analytics
- entrepreneurship
- finance
- management and human resources
- marketing and sales
- self-designed in business

Working hand-in-hand with local businesses through internships, capstone experience, and involvement in our Students Consulting Organizations program, you'll get the real-world experience and leadership skills that today's employers look for.

Programs

- Accounting (Minor) Manchester (p. 649)
- Business Administration (A.S.) (p. 649)
- Business Major (B.A.) (p. 651)
- Business Major: Accounting Option (B.A.) (p. 653)
- Business Minor (p. 655)
- Forensic Accounting Minor (p. 655)

Faculty

Business Faculty

Accounting (Minor) Manchester

https://manchester.unh.edu/program/minor/accounting

Description

Opportunities for growth in the field of accounting continue at an impressive rate, with solid employment opportunities for anyone who qualifies for, and wants a job in the field of accounting. Students will find value in adding this minor to a major of their choice. Upon completion of the Accounting Minor, students should be able to:

- demonstrate an understanding of skills and techniques to be able to recognize transactions and how to record them
- explain and analyze the impact of transactions on an entity's status
- pursue an expanded use of the UNH degree with options to specialize in financial recording and the ability to understand financial statements
- consider the pursuit of certifications that supplement their career potentials, such as the Certified Public Accountant (CPA) or Certified Management Accountant (CMA)

The Accounting Minor can also be used to gain financial skills in all career paths or entrepreneurial aspirations. While the minor is not all-inclusive to train or qualify students to take the CPA exam, it can be used to expose students to the basics of accounting, and may lead to further study of specialization areas in accounting. Faculty assigned to these courses offer expertise and/or certifications in the specific content areas, adding a professional distinction to the program.

Requirements

Academic policies related to Minors.

All five courses (20 credits) applied to the minor must be completed with a minimum grade of C- and an overall GPA of 2.0.

Code	Title	Credits
Required Courses		
BUS 532	Introduction to Financial Accounting	4
BUS 533	Introduction to Managerial Accounting	4
BUS 712	Accounting Information Systems	4
Select two courses from the following:		8
BUS 535	Federal Taxation	
BUS 720	Auditing	
BUS 725	Financial Statement Analysis	
Total Credits		**20**

Business Administration (A.S.)

https://manchester.unh.edu/program/as/business-administration

Description

The Associate in Science degree in Business Administration is designed to provide students with a stepping stone to a career. Graduates of the

program are prepared for entry-level employment opportunities or to continue their education at the baccalaureate level.

For more information, contact the Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 64 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students must complete a minimum of 64 credits to graduate with an associate of science degree in business administration. A minimum cumulative GPA of 2.0 is required for graduation. In addition to completing seven Discovery Program courses and one Inquiry or Inquiry-attribute course within their first 48 earned credits, students must complete seven courses (28 credits) in the major and one elective course.

Code	Title	Credits
Required Courses		
BUS 400	Introduction to Business	4
BUS 492	American Business History	4
BUS 532	Introduction to Financial Accounting	4
BUS 533	Introduction to Managerial Accounting	4
ECN 412	Introduction to Microeconomic Principles	4
Business Administration Electives		
Select two of the following courses: [1,2]		8
BUS 430	Introduction to Business Statistics	
BUS 601	Financial Management	
BUS 610	Marketing Principles and Applications	
BUS 620	Organizational Behavior	
CA 450	Introduction to Public Speaking	
CMN 457	Introduction to Language and Social Interaction	
COMP 405	Introduction to Web Design and Development	
ECN 411	Introduction to Macroeconomic Principles	
ECN 640	Business Law and Economics	
ECN 650	Economics for Managers	
Other 600-level ECN or BUS courses by permission of instructor		
Electives		
Select one elective		4
Total Credits		**32**

1. Students may select electives from 600-level ECN or BUS courses with advisor permission.
2. Students planning to pursue the B.A. in business should select BUS 430 Introduction to Business Statistics and ECN 411 Introduction to Macroeconomic Principles.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
Discovery Course		4
BUS 400	Introduction to Business	4
ECN 412	Introduction to Microeconomic Principles	4
	Credits	**17-18**
Spring		
Quantitative Reasoning Course		4
Discovery Course		4
BUS 532	Introduction to Financial Accounting	4
HUMA 411 or HUMA 412	Humanities I or Humanities II	4
	Credits	**16**
Second Year		
Fall		
BUS 533	Introduction to Managerial Accounting	4
BUS 492	American Business History	4
Business Administration Elective		4
Elective		4
	Credits	**16**
Spring		
Business Administration Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**65-66**

Student Learning Outcomes

Program Learning Outcomes

At the conclusion of the Business program, students should be able to demonstrate:

- Breadth and Depth of Business Knowledge:\\nStudents are expected to demonstrate a growing knowledge across business subfields and understand their inter-relationships, with an aspiration, if desired, to further business studies in a B.A. in Business Administration degree.

At the conclusion of the Business program, students should be able to demonstrate:

- Critical Thinking and Data Analysis: \\nStudents are introduced to the application of qualitative and quantitative analysis with an emphasis on Excel and other business analyses and problem-solving to make informed decisions in business.

- Information Literacy and Communication Skills: \\nStudents acquire and demonstrate skills in retrieving, analyzing, and communicating information from multiple sources across business fields. This includes basic communication skills through written, oral, and visual methods, including reports, case studies, and data visualizations.
- Preparation for Success in Continuing Studies in Business:\ \nStudents will acquire a basic knowledge of business skills, information literacy, communication skills, critical thinking. and data analysis in business. This includes professionalism, cultural sensitivity, and ethical citizenship within business contexts.

Business Major (B.A.)

https://manchester.unh.edu/program/ba/business-major

Description

The bachelor of arts in business has a strong interdisciplinary focus. The curriculum adheres to a philosophy that effective decision making requires a broad understanding of the institutional and cultural climate within which businesses are operating. The program uses the resources of Manchester's business community and its economic strengths to provide students with skills, knowledge, and opportunities.

The business program offers areas of focus in business economics, data analytics, entrepreneurship, finance, management (including human resources), and marketing/sales. Students with a unique interest can create a self-designed concentration with approval of their advisor and the coordinator of the business program.

The culminating capstone experience enables students to apply their knowledge in the form of an internship or applied senior project. Because this is a bachelor of arts program, students fulfill the foreign language requirement. Students have the opportunity to enhance their knowledge through community experiences and internships. Graduates of UNH Manchester's business program are in demand because they offer future employers a portfolio of practical skills and theoretical knowledge, coupled with applied experiences through internships, leading to effective communication and leadership.

For more information, contact the Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- Each required course must be completed with a minimum grade of C-. Students must attain a minimum GPA of 2.0 in major courses required for graduation.
- Majors cannot use BUS 430, ECN 411, or ECN 412 to satisfy both Discovery Program and major requirements.
- Transfer students must complete at least half of their credits in the major and the 8-credit capstone experience (BUS 705 and either BUS 750 or BUS 760) in residence at UNH Manchester.

Code	Title	Credits
Introductory Business Core Courses		
BUS 400	Introduction to Business	4
BUS 405	Introduction to Business Computer Applications	4
BUS 430	Introduction to Business Statistics	4
BUS 532	Introduction to Financial Accounting	4
BUS 533	Introduction to Managerial Accounting	4
ECN 411	Introduction to Macroeconomic Principles	4
ECN 412	Introduction to Microeconomic Principles	4
ENGL 401	First-Year Writing	4
MATH 420	Finite Mathematics	4
or MATH 422	Mathematics for Business Applications	
or MATH 425	Calculus I	
PTC 500	Business Communication	4
Select one course from the following:		4
COMP 405	Introduction to Web Design and Development	
COMP 415	Mobile Computing First and For Most	
COMP 430	Systems Fundamentals	
Intermediate Business Core		
BUS 601	Financial Management	4
BUS 610	Marketing Principles and Applications	4
BUS 620	Organizational Behavior	4
BUS 690	Business Program Internship [1]	1-4
Capstone		
BUS 705	Business Ethics [2]	4
BUS 750	Business Capstone Senior Seminar - Internship [2]	4
or BUS 760	BUS SR SEM - Research Project	
Area of Study		
Select an area of study from the below.		16
Total Credits		**81-84**

Areas of Study

Code	Title	Credits
Business Economics		
Select four courses from the following (including at least one course at 600-level or above):		16
BUS 690	Business Program Internship	
BUS 695	Independent Study in Business	
DATA 557	Introduction to Data Science and Analytics	
ECN 640	Business Law and Economics	
ECN 650	Economics for Managers	
Total Credits		**16**

Code	Title	Credits
Data Analytics		
Select four courses from the following:		16
BUS 515	Introduction to Business Analytics	
BUS 675	Special Topics in Business Administration	
or DAT 510	Introduction to Data Analytics	
DAT 535	Data Mining, Cleaning, and Visualization	
DAT 610	Data Analytics and Technologies	
DAT 620	Data Analytics in Business Intelligence	
Total Credits		**16**

Code	Title	Credits
Entrepreneurship		
Select four courses from the following:		16

ENT 500	The Entrepreneurial Mindset	
ENT 600	Launching and Managing Entrepreneurial Ventures	
ENT 611	Entrepreneurial Marketing	
ENT 703	Entrepreneurial Finance	
ENT 707	Legalities and Ethics of Entrepreneurship	
Total Credits		**16**

Code	Title	Credits
Finance		
Select four courses from the following:		16
BUS 530	Personal Finance	
BUS 645	Real Estate Investment & Finance	
FNC 611	Money and Banking	
FNC 612	Investment Principles	
FNC 675	Financial Modeling and Decision-Making	
Total Credits		**16**

Code	Title	Credits
Management		
Select four courses from the following:		16
BUS 453	Leadership for Managers	
BUS 455		
BUS 520		
BUS 575	Students Consulting Organizations	
BUS 640	Business Communication and Conflict	
BUS 690	Business Program Internship	
BUS 695	Independent Study in Business	
ECN 640	Business Law and Economics	
ECN 650	Economics for Managers	
Total Credits		**16**

Code	Title	Credits
Marketing		
Select three courses from the following:		12
BUS 565	Selling and Sales Management	
BUS 661		
BUS 662	Digital Marketing Applications	
BUS 663	Services Marketing and Operations Management	
Select one course from the following or one course not taken from the list above:		4
BUS 675	Special Topics in Business Administration	
BUS 690	Business Program Internship (in Marketing or Communication)	
BUS 695	Independent Study in Business (Marketing/Communication Project)	
COMP 405	Introduction to Web Design and Development	
COMP 415	Mobile Computing First and For Most	
Total Credits		**16**

Code	Title	Credits
Self-Designed		
Select four courses (or 16 credit hours) with faculty approval, including at least one course at the 500-level or above.		16
Total Credits		**16**

1 Experiential learning is required prior to the last semester at the University. BUS 690 Business Program Internship as an internship course satisfies this requirement. Most students will take two internships at UNH Manchester - (BUS 690 Business Program Internship and BUS 750 Business Capstone Senior Seminar - Internship.)

2 Business Capstone Experience (two courses: BUS 705 Business Ethics and one senior business seminar [BUS 750 Business Capstone Senior Seminar - Internship or BUS 760 BUS SR SEM - Research Project], fulfills the Discovery Program capstone requirement for business majors and is taken during the senior year).

Note: Because this is a bachelor of arts program, students must fulfill a language requirement. Efforts will be made to enhance fluency through subsequent courses and community experiences.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
BUS 400	Introduction to Business	4
Discovery Course		4
Elective		4
	Credits	**17-18**
Spring		
MATH 422	Mathematics for Business Applications	4
ECN 411	Introduction to Macroeconomic Principles	4
Discovery Course		4
BUS 405	Introduction to Business Computer Applications	4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
ECN 412	Introduction to Microeconomic Principles	4
BUS 430	Introduction to Business Statistics	4
BUS 532	Introduction to Financial Accounting	4
	Credits	**16**
Spring		
Foreign Language		4
BUS 533	Introduction to Managerial Accounting	4
PTC 500	Business Communication	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
COMP 405 or COMP 415	Introduction to Web Design and Development or Mobile Computing First and For Most	4
BUS 601	Financial Management	4
BUS 610	Marketing Principles and Applications	4
Discovery Course		4
	Credits	**16**
Spring		
BUS 620	Organizational Behavior	4
BUS 690	Business Program Internship	4
Discovery Course		4

Major Area of Study Course		4
	Credits	**16**
Fourth Year		
Fall		
BUS 705	Business Ethics	4
Discovery Course		4
Major Area of Study Course		4
Major Area of Study Course		4
	Credits	**16**
Spring		
BUS 750 or BUS 760	Business Capstone Senior Seminar - Internship or BUS SR SEM - Research Project	4
Major Area of Study Course		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

At the conclusion of the Business program, students should be able to demonstrate:

- Apply breadth and depth of knowledge about business and economic concepts, theories and methodologies, especially in the sub-field concentrations of accounting, finance, management, business ethics, leadership, organizational behavior, human resources, marketing/sales, statistics, business computer/software applications, and business data analytics, and how these varying fields are inter-related and complementary.
- Apply critical thinking skills to the qualitative and quantitative analysis of data through working knowledge of office suite products such as Microsoft Word, Excel, and PowerPoint, PowerBI or Tableau, including analysis of the data's impact on business decision making in local, national, and global business situations.
- Information literacy, including the ability to find, retrieve, analyze, and communicate information from online or traditional venues in the fields of business, economics, accounting, finance, management, human resources, entrepreneurship, leadership, organizational behavior, marketing, and business ethics.
- Effective interpersonal writing and presentation skills in all types of business and professional communications: memoranda, case studies, analytical reports, data visualizations, slide presentations, and project reports, along with the ability to convey this information with audiences in the private and public sectors, including the ability to lead discussion groups and multi-task project teams.
- Professionalism in the workplace, including sensitivity to cultural differences and an appreciation for the diversity of human experience and perspectives, as well as an understanding of the meaning of engaged citizenship as members of an ethical business community.

Business Major: Accounting Option (B.A.)

https://manchester.unh.edu/program/ba/business-major-accounting-option

Description

The Accounting Option is offered in response to the growing demand for accounting graduates in public accounting firms as well as in industry. Many local public accounting firms have expressed that with an expected high retirement rate among "baby boomers", there appears to be a need for graduates with robust accounting credentials. Representatives from well-known CPA exam prep course firms expressed the opinion that accountants are in high demand and the unemployment rate in this industry is very low.

The Accounting Option offers students the necessary courses to enable them to sit for the CPA exam, which is one of the major steps in obtaining a CPA license. The requirements for sitting for the CPA exam in the State of New Hampshire are a bachelor's degree, 24 credits in business subjects, and 30 credits in accounting subjects. The Accounting Option within the Business program provides these required credits.

This program also provides the students an opportunity to seek professional accounting positions in corporate environments. Students would be encouraged to take the CMA (Certified Management Accountant) exam, leading to this desirable certification.

For more information, contact the Manchester Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students must complete 128 credits to graduate. Each required course must be completed with a minimum grade of C-. Students must attain a minimum GPA of 2.0 in major courses required for graduation. Majors cannot use BUS 430, ECN 411, or ECN 412 to satisfy both Discovery Program and major requirements. Transfer students must complete at least half of their credits in the major and the 8-credit capstone experience courses in-residence at UNH Manchester.

Code	Title	Credits
Introductory Business Core Courses		
BUS 400	Introduction to Business	4
BUS 405	Introduction to Business Computer Applications	4

BUS 430	Introduction to Business Statistics	4
BUS 532	Introduction to Financial Accounting	4
BUS 533	Introduction to Managerial Accounting	4
ECN 411	Introduction to Macroeconomic Principles	4
ECN 412	Introduction to Microeconomic Principles	4
ENGL 401	First-Year Writing	4
MATH 420	Finite Mathematics	4
or MATH 422	Mathematics for Business Applications	
or MATH 425	Calculus I	
PTC 500	Business Communication	4
Select one course from the following:		4
COMP 405	Introduction to Web Design and Development	
COMP 415	Mobile Computing First and For Most	
COMP 430	Systems Fundamentals	
Intermediate Business Core Courses		
BUS 601	Financial Management	4
BUS 610	Marketing Principles and Applications	4
BUS 620	Organizational Behavior	4
BUS 690	Business Program Internship [1]	1-4
Capstone Experience		
BUS 705	Business Ethics [2]	4
BUS 750	Business Capstone Senior Seminar - Internship [2]	4
or BUS 760	BUS SR SEM - Research Project	
Total Credits		**65-68**

1 Experiential learning is required prior to the last semester at the University. BUS 690 Business Program Internship satisfies this experiential learning requirement.

2 Business Capstone Experience (two courses: BUS 705 Business Ethics and one senior business seminar [BUS 750 Business Capstone Senior Seminar - Internship or BUS 760 BUS SR SEM - Research Project] fulfills the Discovery Program capstone requirement for business majors and is taken during the senior year).
Note: Because this is a bachelor of arts program, students must fulfill a language requirement. Efforts will be made to enhance fluency through subsequent courses and community experiences.

Code	Title	Credits
Accounting Option		
Required Courses		
BUS 535	Federal Taxation	4
BUS 603	Intermediate Financial Accounting I	4
BUS 615	Intermediate Financial Accounting II	4
BUS 720	Auditing	4
Select two courses from the following:		8
BUS 712	Accounting Information Systems	
BUS 725	Financial Statement Analysis	
HLS 640	Forensic Accounting	
Total Credits		**24**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
BUS 400	Introduction to Business	4
BUS 532 or BUS 533	Introduction to Financial Accounting or Introduction to Managerial Accounting	4
Discovery Course		4
	Credits	**17-18**
Spring		
MATH 422	Mathematics for Business Applications	4
Discovery Course		4
BUS 532 or BUS 533	Introduction to Financial Accounting or Introduction to Managerial Accounting	4
ECN 411 or ECN 412	Introduction to Macroeconomic Principles or Introduction to Microeconomic Principles	4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
ECN 411 or ECN 412	Introduction to Macroeconomic Principles or Introduction to Microeconomic Principles	4
BUS 430	Introduction to Business Statistics	4
BUS 603	Intermediate Financial Accounting I	4
	Credits	**16**
Spring		
Foreign Language		4
BUS 615	Intermediate Financial Accounting II	4
PTC 500	Business Communication	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
COMP 405 or COMP 415	Introduction to Web Design and Development or Mobile Computing First and For Most	4
BUS 601	Financial Management	4
BUS 610	Marketing Principles and Applications	4
Discovery Course		4
	Credits	**16**
Spring		
BUS 405	Introduction to Business Computer Applications	4
BUS 620	Organizational Behavior	4
BUS 690	Business Program Internship	4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
BUS 705	Business Ethics	4
Discovery Course		4
BUS 535	Federal Taxation	4
Accounting Elective		4
	Credits	**16**

Spring		
BUS 750	Business Capstone Senior Seminar - Internship	4
BUS 720	Auditing	4
Discovery Course		4
Accounting Elective		4
	Credits	**16**
	Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

At the conclusion of the Business program, students should be able to demonstrate:

- Apply breadth and depth of knowledge about business and economic concepts, theories and methodologies, especially in the sub-field concentrations of accounting, finance, management, business ethics, leadership, organizational behavior, human resources, marketing/sales, statistics, business computer/software applications, and business data analytics, and how these varying fields are inter-related and complementary.
- Apply critical thinking skills to the qualitative and quantitative analysis of data through working knowledge of office suite products such as Microsoft Word, Excel, and PowerPoint, PowerBI or Tableau, including analysis of the data's impact on business decision making in local, national, and global business situations.
- Information literacy, including the ability to find, retrieve, analyze, and communicate information from online or traditional venues in the fields of business, economics, accounting, finance, management, human resources, entrepreneurship, leadership, organizational behavior, marketing, and business ethics.
- Effective interpersonal writing and presentation skills in all types of business and professional communications: memoranda, case studies, analytical reports, data visualizations, slide presentations, and project reports, along with the ability to convey this information with audiences in the private and public sectors, including the ability to lead discussion groups and multi-task project teams.
- Professionalism in the workplace, including sensitivity to cultural differences and an appreciation for the diversity of human experience and perspectives, as well as an understanding of the meaning of engaged citizenship as members of an ethical business community.

Business Minor

https://manchester.unh.edu/program/minor/business

Description

The minor in business allows students to pursue their interests in the liberal arts and sciences while building a foundation of business skills and adding a valuable credential to their portfolio and resume.

Requirements

Academic policies related to Minors.

- Students must complete five courses (20 credits) for the minor, with a cumulative minimum grade point average of 2.0 and with no grade below a C- grade.
- Transfer course approval for the minor is limited to at most, two relevant courses successfully completed at another accredited institution, subject to syllabi review and approval.
- Students must complete a minimum of 20 credits for the minor, with a maximum of 8 credits transferred from accredited institutions and a minimum of 12 credits completed in residence at UNH.

Code	Title	Credits
Required Courses		
BUS 400	Introduction to Business	4
BUS 532	Introduction to Financial Accounting	4
ECN 412	Introduction to Microeconomic Principles	4
or ECN 411	Introduction to Macroeconomic Principles	
Electives		
Select two courses from the following (one course must be at the 600-level or above):		8
BUS 430	Introduction to Business Statistics	
BUS 533	Introduction to Managerial Accounting	
BUS 601	Financial Management	
BUS 610	Marketing Principles and Applications	
BUS 620	Organizational Behavior	
Total Credits		**20**

Other 600- or 700-level courses in business (BUS) or economics (ECN) may be substituted for courses listed above with permission of the business program coordinator. This may include an Internship course (BUS 690 Business Program Internship), Special Topics courses (BUS 675 Special Topics in Business Administration or an Independent Study in Business (BUS 695 Independent Study in Business).

Forensic Accounting Minor

https://manchester.unh.edu/program/minor/forensic-accounting

Description

Opportunities for growth in the field of Forensic Accounting continue at an impressive rate. Career options for students who add the minor in Forensic Accounting can include investigative and litigation support to accounting firms, banks, police departments, government agencies and other organizations. The knowledge attained in this minor can help a homeland security expert or accountant investigate the rampant fraud that is often tied to homeland security or business threats, including non-accounting fraud issues.

In addition to following the knowledge content of the Certified Fraud Examiner (CFE) certification exam offered by the Association of Certified Fraud Examiners, the skills attained in the Forensic Accounting minor will augment the students' potential in a variety of career opportunities in homeland security and fraud investigation. The CFE consists of four parts: Fraud Prevention and Deterrence, Financial Transactions and Fraud Schemes, Investigation, and Law. This credential is highly regarded in the security industry, corporate risk management, law offices, and in government agencies such as the Federal Bureau of Investigation.

The Forensic Accounting minor will appeal to students who would like to add specialized skills to their Homeland Security degree. In addition, the Forensic Accounting minor can be used as a minor in other degree paths (except for the B.A. in Business, Accounting option). While it is not

training students to pursue the CPA or careers more focused in traditional accounting, it can be used to expose students to the field of accounting.

Requirements

Academic policies related to Minors.

The Forensic Accounting minor requires students to complete five courses (20 credits) as outlined below.

Courses must be completed with a minimum grade of C- and an overall GPA of 2.0 to count for the minor.

Students must take at least three 500-level or above courses to complete the minor.

Code	Title	Credits
Required Courses		
BUS 532	Introduction to Financial Accounting	4
or ADMN 502	Financial Accounting	
ECN 640	Business Law and Economics [1]	4
or HLS 520	Homeland Security Law and Policy	
HLS 540	Prevention and Detection of Fraud	4
HLS 615	Introduction to Fraud Investigation	4
HLS 640	Forensic Accounting	4
Total Credits		**20**

[1] ECN 640 Business Law and Economics for Business majors; HLS 520 Homeland Security Law and Policy for Homeland Security majors

Communication Arts

Shaping skilled communicators through creativity, technology and hands-on experience

With expert faculty, state-of-the-art media studios and a diverse network of internship opportunities, our Communication Arts program gives you the skills and experience to turn your passion into a profession. Our highly adaptable program helps bring your future into focus and opens doors to limitless career possibilities — shaping the next generation of filmmakers, digital content producers, screenwriters, social media and public relations specialists, HR professionals and beyond.

Recent data from the American Academy of Arts & Sciences shows that Communication Arts is the largest and most popular of the humanities disciplines. Part of this interest is because we live in a world where communication is a vital part of daily life, regardless of career or industry. But another part, potentially even more important, is the inherent flexibility that students find — not only during college, but in the job market after graduation.

Your interests inspire what you study, allowing you to focus your degree in areas like Advertising and Public Relations, Cinema and Media Arts, Digital Media, and Human Relations. Students can also further their professional and creative interests by doing real-world internships for credit.

Through hands-on learning in our classrooms, in the field and in our audio, video and editing studios, you'll shape the social, creative, critical thinking, and technical communication skills you need for success in industries from media to business, healthcare, education, and more.

Programs

- Communication Arts Major (B.A.) (p. 656)
- Communication Arts Major: Advertising and Public Relations Option (B.A.) (p. 659)
- Communication Arts Major: Cinema and Media Arts Option (B.A.) (p. 661)
- Communication Arts Major: Digital Media Option (B.A.) (p. 663)
- Communication Arts Major: Human Relations Option (B.A.) (p. 665)
- Communication Arts Minor (p. 668)

Faculty

Communication Arts Faculty

Communication Arts Major (B.A.)

https://manchester.unh.edu/program/ba/communication-arts-major

Description

Communication Arts majors explore the creativity, artistry, and impact of human communication. The program offers a rich variety of learning experiences, including:

- Working with cutting-edge digital media in state-of-the-art sound and video production studios and a high-definition editing suite with full Adobe creative cloud access.
- Discovering how communication theories and practices shape personal identity, social skills, professional relationships, and human relations.
- Enhancing your media writing, social media, public relations, and strategic communication skills.
- Exploring the history of media using a super-tech screening room with surround sound.
- Developing hands-on research activities, creative media projects, and internship experiences that link students with businesses, nonprofits, and the community.

To complete the major, students can take courses from across the Communication Arts curriculum, or they may choose to focus their coursework in one of four suggested areas of study: Advertising and Public Relations*, Cinema and Media Arts*, Digital Media*, or Human Relations*.

A degree in Communication Arts prepares students for today's communication-driven society. The program offers students the knowledge and skills they need to succeed as professional communicators, media artists, and entrepreneurs working in a variety of careers. Our alumni have gone on to work in fields such as radio, television, film, web, digital video, corporate communications, journalism, public relations, social media, advertising, sales, strategic communication, audience research, counseling, conflict mediation, human resources, and more. A Communication Arts degree also creates pathways to careers in government, social services, public education,

and community affairs, where employers seek graduates who can think creatively and communicate effectively to a variety of audiences and constituents.

Communication Arts faculty bring exceptional expertise to the classroom and are actively engaged in their own creative and scholarly work. They regularly share their knowledge with audiences around the state, the country, and the world. Some are also experienced professionals who bring current, real-world knowledge from the workplace to the classroom. In addition to classroom instruction, the program also provides students with exceptional access to experiential learning opportunities (internships, community-based research, service learning, and media production projects) that occur within real-life settings.

For more information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

* Advertising and Public Relations, Cinema and Media Arts, Digital Media, and Human Relations are **Degree Options** that appear on the official UNH transcript and diploma. The specific requirements for each Degree Option are presented elsewhere in this catalog. Students are encouraged to contact the Communication Arts program coordinator or their academic advisor to discuss whether a Degree Option is the right choice for them.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Communication Arts (CA) majors must complete 10 courses (40 credits) and maintain a minimum overall grade point average of 2.0 in the major. Transfer students must complete at least 20 credits in the Communication Arts major at UNH. Communication Arts majors may use up to two CMN and/or CA courses toward both the Communication Arts major and UNH Discovery Program requirements.

Code	Title	Credits
I. Required Core Courses [1]		
CMN 455	Introduction to Media Studies	4
CMN 456	Propaganda and Persuasion	4
CMN 457	Introduction to Language and Social Interaction	4
II. Selected Coursework [2]		
Select three courses from area A, two from area B, two from area C below.		28
Total Credits		**40**

[1] Students must earn a "C" or better in each course to satisfy CA degree requirements.

[2] Students must earn a "C-" or better in each course to satisfy CA degree requirements.

Code	Title	Credits
A. Communication Practices		
Select three courses from the following:		12
CA 450	Introduction to Public Speaking	
CA 500	Media Writing	
CA 501	Internship/Communication in the Urban Community	
CA 502	Image and Sound	
CA 507	Relational Violence	
CA 508	Conflict in Relational Communication	
CA 512	Screenwriting	
CA 514	Fundamentals of Video Production	
CA 515	Advanced Video Production	
CA 517	Fundamentals of Audio Prod	
CA 520	Special Topics in Applied Communication	
CA 522	Graphic Design I	
CA 523	Graphic Design II	
PSYC 762	Counseling	
Total Credits		**12**

Code	Title	Credits
B. Communication Practices: Organization, History, and Policy		
Select two courses from the following:		8
CA 527	History of Film	
CA 531	History and Organization of Advertising	
CA 532	Typography I	
CA 536	LGBT Images and Perspectives	
CA 538	Gender	
CA 539	Communicating in Families	
CA 540	Public Relations	
CA 542	Social Media for Organizations and Business	
CA 550	Special Topics in Communication Organization, History, and Policy	
COMP 560	Ethics and the Law in the Digital Age	
ENGL 534	21st Century Journalism: How the News Works	
PHIL 565	Philosophy Through Film	
Total Credits		**8**

Code	Title	Credits
C. Communication Practices: Theory and Research		
Select two courses from the following:		8
CA 610	Communication Technologies and Culture	
CA 612	Narrative	
CA 615	Film History/Theory and Method	
CA 618	Documentary	
CA 720	Seminar	
CA 795	Independent Study	
Total Credits		**8**

Capstone Requirement

The capstone requirement will be satisfied in a student's senior year by completion of a specific four-credit capstone course at the 600 or 700 levels. Students may not enroll in a capstone course until they have completed all three CA program core courses (CMN 455 Introduction to Media Studies, CMN 456 Propaganda and Persuasion, and CMN 457 Introduction to Language and Social Interaction) and at least one Area A course and one Area B course. Students must also have completed the prerequisites for the particular capstone course they seek to take. Exceptions to this rule must be approved by the student's academic advisor and CA program coordinator. The capstone course can also fulfill an Area C course requirement.

The capstone experience offers seniors an opportunity to synthesize and apply knowledge and skills gained throughout their communication arts

major coursework. The capstone course requires students to conduct an original research study, a creative media project, an internship, community-based research, or an advanced service learning project in communication arts under the close supervision of a communication arts faculty member. Students are strongly encouraged to share their capstone projects with the larger UNH community through participation in the Undergraduate Research Conference, a presentation in the Brown Bag lunch series, publication in the UNH undergraduate journal *Inquiry*, or presentation in some other public venue. Students should work closely with their advisors to make sure the capstone requirement has been satisfied.

Courses that satisfy this requirement include, but are not limited to:

Code	Title	Credits
Capstone Courses		
CA 612	Narrative	4
CA 615	Film History/Theory and Method	4
CA 720	Seminar	4
CA 795	Independent Study	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
CMN 455	Introduction to Media Studies	4
Discovery Course		4
Elective		4
	Credits	**17-18**
Spring		
Quantitative Reasoning		4
CMN 456	Propaganda and Persuasion	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
CMN 457	Introduction to Language and Social Interaction	4
Major Elective		4
Discovery Course		4
	Credits	**16**
Spring		
Foreign Language		4
Major Elective		4
Major Elective		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

Upon completion of the Communication Arts program, students will be able to:

- Analyze how creativity, artistry, narrative, identity, persuasion, and ethics shape messages and relationships produced within a variety of social, organizational, and industry contexts.
- Demonstrate knowledge and skills that give them expertise and proficiency in areas such as human relations, social media, digital video, audio production, graphic design, writing, and speaking.
- Know the history of communication practices and understand how media technologies and messages have impacted societies, cultures, organizations, and businesses.
- Effectively research and creatively explore communication practices, experiences, and trends using high quality sources of information, multiple modes of inquiry, and multiple presentation formats.
- Identify professional interests or career paths by working with the Internship and Career Planning Office and by engaging with communication settings outside the classroom through internships, service learning, field trips, and independent studies.

Communication Arts Major: Advertising and Public Relations Option (B.A.)

https://manchester.unh.edu/program/ba/communication-arts-major-advertising-public-relations-option

Description

Students in the Advertising and Public Relations option develop knowledge and skills relating to the use of strategic communication practices within a variety of settings such as ad agencies, commercial businesses, and nonprofit organizations. A dynamic mix of historical, social, ethical, organizational, creative, analytical, and experiential perspectives is used to create a strong foundation for professional success and graduate study. Coursework covers topics such as earned and paid media, social media, graphic design, media writing, data analytics, and audience research. Some courses use field trips and guest speakers to keep students up-to-date with current trends. An internship in advertising and public relations is required.

For more information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Communication Arts (CA) majors must complete 10 courses (40 credits) and maintain a minimum overall grade point average of 2.0 in the major. Transfer students must complete at least 20 credits in the Communication Arts major at UNH. Communication Arts majors may use up to two CMN and/or CA courses toward both the Communication Arts major and UNH Discovery Program requirements.

Code	Title	Credits
I. Required Core Courses [1]		
CMN 455	Introduction to Media Studies	4
CMN 456	Propaganda and Persuasion	4
CMN 457	Introduction to Language and Social Interaction	4
II. Selected Coursework [2]		
Select three courses from area A, two from area B, two from area C below.		28
Total Credits		**40**

[1] Students must earn a "C" or better in each course to satisfy CA degree requirements.

[2] Students must earn a "C-" or better in each course to satisfy CA degree requirements.

Code	Title	Credits
A. Communication Practices		
Select three courses from the following:		12
CA 450	Introduction to Public Speaking	
CA 500	Media Writing	
CA 501	Internship/Communication in the Urban Community	
CA 502	Image and Sound	
CA 507	Relational Violence	
CA 508	Conflict in Relational Communication	
CA 512	Screenwriting	
CA 514	Fundamentals of Video Production	
CA 515	Advanced Video Production	
CA 517	Fundamentals of Audio Prod	
CA 522	Graphic Design I	
CA 523	Graphic Design II	
PSYC 762	Counseling	
Total Credits		**12**

Code	Title	Credits
B. Communication Practices: Organization, History, and Policy		
Select two courses from the following:		8
CA 527	History of Film	
CA 531	History and Organization of Advertising	
CA 532	Typography I	
CA 536	LGBT Images and Perspectives	
CA 538	Gender	
CA 539	Communicating in Families	
CA 540	Public Relations	
CA 542	Social Media for Organizations and Business	
CA 550	Special Topics in Communication Organization, History, and Policy	
COMP 560	Ethics and the Law in the Digital Age	
ENGL 534	21st Century Journalism: How the News Works	
PHIL 565	Philosophy Through Film	
Total Credits		**8**

Code	Title	Credits
C. Communication Practices: Theory and Research		
Select two courses from the following:		8
CA 610	Communication Technologies and Culture	
CA 612	Narrative	
CA 615	Film History/Theory and Method	
CA 618	Documentary	
CA 720	Seminar	
CA 795	Independent Study	
Total Credits		**8**

Advertising and Public Relations Option Requirements

The option in Advertising and Public Relations consists of 24 credits as distributed below. Note that some courses may also be used to fulfill the requirements of the Communication Arts major. Courses applied to the option must be completed with a minimum grade of C- and overall GPA of 2.0. Transfer students must complete a minimum of 12 credits, including the Advertising and Public Relations Internship, at UNH Manchester.

Code	Title	Credits
Advertising and Public Relations Option		
Requirements		
Select two courses from the following:		8
CA 531	History and Organization of Advertising	
CA 540	Public Relations	
CA 542	Social Media for Organizations and Business	

CA 550	Special Topics in Communication Organization, History, and Policy [1]	
Select two courses from the following:		8
CA 450	Introduction to Public Speaking	
CA 500	Media Writing	
CA 514	Fundamentals of Video Production	
CA 520	Special Topics in Applied Communication	
CA 522	Graphic Design I	
CA 523	Graphic Design II	
CA 532	Typography I	
DATA 557	Introduction to Data Science and Analytics	
Select one course from the following:		4
CA 610	Communication Technologies and Culture	
CA 720	Seminar [1]	
CA 795	Independent Study [1]	
Select one course from the following:		4
CA 501	Internship/Communication in the Urban Community [1]	
UMST 500	Internship [1]	
Total Credits		**24**

[1] Topic must be related to advertising and public relations, and approved by advisor.

Capstone Requirement

The capstone requirement will be satisfied in a student's senior year by completion of a specific four-credit capstone course at the 600 or 700 levels. Students may not enroll in a capstone course until they have completed all three CA program core courses (CMN 455 Introduction to Media Studies, CMN 456 Propaganda and Persuasion, and CMN 457 Introduction to Language and Social Interaction) and at least one Area A course and one Area B course. Students must also have completed the prerequisites for the particular capstone course they seek to take. Exceptions to this rule must be approved by the student's academic advisor and CA program coordinator. The capstone course can also fulfill an Area C course requirement.

The capstone experience offers seniors an opportunity to synthesize and apply knowledge and skills gained throughout their communication arts major coursework. The capstone course requires students to conduct an original research study, a creative media project, an internship, community-based research, or an advanced service learning project in communication arts under the close supervision of a communication arts faculty member. Students are strongly encouraged to share their capstone projects with the larger UNH community through participation in the Undergraduate Research Conference, a presentation in the Brown Bag lunch series, publication in the UNH undergraduate journal *Inquiry*, or presentation in some other public venue. Students should work closely with their advisors to make sure the capstone requirement has been satisfied.

Courses that satisfy this requirement include, but are not limited to:

Code	Title	Credits
Capstone Courses		
CA 612	Narrative	4
CA 615	Film History/Theory and Method	4
CA 720	Seminar	4
CA 795	Independent Study	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
CMN 455	Introduction to Media Studies	4
Discovery Course		4
Elective		4
	Credits	**17-18**
Spring		
Quantitative Reasoning		4
CMN 456	Propaganda and Persuasion	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
CMN 457	Introduction to Language and Social Interaction	4
Major Elective		4
Discovery Course		4
	Credits	**16**
Spring		
Foreign Language		4
Major Elective		4
Major Elective		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
Major Elective		4

Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

Upon completion of the Communication Arts program, students will be able to:

- Analyze how creativity, artistry, narrative, identity, persuasion, and ethics shape messages and relationships produced within a variety of social, organizational, and industry contexts.
- Demonstrate knowledge and skills that give them expertise and proficiency in areas such as human relations, social media, digital video, audio production, graphic design, writing, and speaking.
- Know the history of communication practices and understand how media technologies and messages have impacted societies, cultures, organizations, and businesses.
- Effectively research and creatively explore communication practices, experiences, and trends using high quality sources of information, multiple modes of inquiry, and multiple presentation formats.
- Identify professional interests or career paths by working with the Internship and Career Planning Office and by engaging with communication settings outside the classroom through internships, service learning, field trips, and independent studies.

Communication Arts Major: Cinema and Media Arts Option (B.A.)

https://manchester.unh.edu/program/ba/communication-arts-major-cinema-media-arts-option

Description

Students choosing the Cinema & Media Arts Option study the creative media industries with a focus on developing professional skills and knowledge relating to careers in film, television and radio. Courses cover topics such as narrative, screenwriting, audio and video production, film history and criticism, documentary, and audience research methods. Students may elect to take an internship in the area of cinema and media arts to help fulfill requirements for the Option.

For more information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Communication Arts (CA) majors must complete 10 courses (40 credits) and maintain a minimum overall grade point average of 2.0 in the major. Transfer students must complete at least 20 credits in the Communication Arts major at UNH. Communication Arts majors may use up to two CMN and/or CA courses toward both the Communication Arts major and UNH Discovery Program requirements.

Code	Title	Credits
I. Required Core Courses [1]		
CMN 455	Introduction to Media Studies	4
CMN 456	Propaganda and Persuasion	4
CMN 457	Introduction to Language and Social Interaction	4
II. Selected Coursework [2]		
Select three courses from area A, two from area B, two from area C below.		28
Total Credits		**40**

1. Students must earn a "C" or better in each course to satisfy CA degree requirements.
2. Students must earn a "C-" or better in each course to satisfy CA degree requirements.

Code	Title	Credits
A. Communication Practices		
Select three courses from the following:		12
CA 450	Introduction to Public Speaking	
CA 500	Media Writing	
CA 501	Internship/Communication in the Urban Community	
CA 502	Image and Sound	
CA 507	Relational Violence	
CA 508	Conflict in Relational Communication	
CA 512	Screenwriting	
CA 514	Fundamentals of Video Production	
CA 515	Advanced Video Production	
CA 517	Fundamentals of Audio Prod	
CA 520	Special Topics in Applied Communication	
CA 522	Graphic Design I	
CA 523	Graphic Design II	
PSYC 762	Counseling	
Total Credits		**12**

Code	Title	Credits
B. Communication Practices: Organization, History, and Policy		
Select two courses from the following:		8
CA 527	History of Film	
CA 531	History and Organization of Advertising	
CA 532	Typography I	
CA 536	LGBT Images and Perspectives	

CA 538	Gender	
CA 539	Communicating in Families	
CA 540	Public Relations	
CA 542	Social Media for Organizations and Business	
CA 550	Special Topics in Communication Organization, History, and Policy	
COMP 560	Ethics and the Law in the Digital Age	
ENGL 534	21st Century Journalism: How the News Works	
PHIL 565	Philosophy Through Film	
Total Credits		**8**

Code	Title	Credits
C. Communication Practices: Theory and Research		
Select two courses from the following:		8
CA 610	Communication Technologies and Culture	
CA 612	Narrative	
CA 615	Film History/Theory and Method	
CA 618	Documentary	
CA 720	Seminar	
CA 795	Independent Study	
Total Credits		**8**

Cinema and Media Arts Option Requirements

The option in Cinema and Media Arts consists of 24 credits as distributed below. Courses may be used toward the Communication Arts Degree requirements as well as the Cinema and Media Arts option. Courses applied to the option must be completed with a minimum grade of C- and overall GPA of 2.0. Transfer students must complete a minimum of 12 credits at UNH Manchester.

Code	Title	Credits
Cinema and Media Arts Option		
Requirements		
Select three courses from the following:		12
CA 500	Media Writing	
CA 512	Screenwriting	
CA 514	Fundamentals of Video Production	
CA 515	Advanced Video Production	
CA 517	Fundamentals of Audio Prod	
CA 520	Special Topics in Applied Communication [1]	
Select two courses from the following:		8
CA 501	Internship/Communication in the Urban Community [1]	
CA 502	Image and Sound	
CA 527	History of Film	
CA 550	Special Topics in Communication Organization, History, and Policy [1]	
PHIL 565	Philosophy Through Film	
Select one course from the following:		4
CA 612	Narrative	
CA 615	Film History/Theory and Method	
CA 618	Documentary	
CA 795	Independent Study [1]	
Total Credits		**24**

[1] Topic must be related to cinema and media arts.

Capstone Requirement

The capstone requirement will be satisfied in a student's senior year by completion of a specific four-credit capstone course at the 600 or 700 levels. Students may not enroll in a capstone course until they have completed all three CA program core courses (CMN 455 Introduction to Media Studies, CMN 456 Propaganda and Persuasion, and CMN 457 Introduction to Language and Social Interaction) and at least one Area A course and one Area B course. Students must also have completed the prerequisites for the particular capstone course they seek to take. Exceptions to this rule must be approved by the student's academic advisor and CA program coordinator. The capstone course can also fulfill an Area C course requirement.

The capstone experience offers seniors an opportunity to synthesize and apply knowledge and skills gained throughout their communication arts major coursework. The capstone course requires students to conduct an original research study, a creative media project, an internship, community-based research, or an advanced service learning project in communication arts under the close supervision of a communication arts faculty member. Students are strongly encouraged to share their capstone projects with the larger UNH community through participation in the Undergraduate Research Conference, a presentation in the Brown Bag lunch series, publication in the UNH undergraduate journal *Inquiry*, or presentation in some other public venue. Students should work closely with their advisors to make sure the capstone requirement has been satisfied.

Courses that satisfy this requirement include, but are not limited to:

Code	Title	Credits
Capstone Courses		
CA 612	Narrative	4
CA 615	Film History/Theory and Method	4
CA 720	Seminar	4
CA 795	Independent Study	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
CMN 455	Introduction to Media Studies	4
Discovery Course		4
Elective		4
	Credits	**17-18**
Spring		
Quantitative Reasoning		4
CMN 456	Propaganda and Persuasion	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
CMN 457	Introduction to Language and Social Interaction	4
Major Elective		4
Discovery Course		4
	Credits	**16**

Spring	
Foreign Language	4
Major Elective	4
Major Elective	4
Discovery Course	4
Credits	**16**
Third Year	
Fall	
Major Elective	4
Discovery Course	4
Elective	4
Elective	4
Credits	**16**
Spring	
Major Elective	4
Discovery Course	4
Elective	4
Elective	4
Credits	**16**
Fourth Year	
Fall	
Major Elective	4
Discovery Course	4
Elective	4
Elective	4
Credits	**16**
Spring	
Major Elective	4
Discovery Course	4
Elective	4
Elective	4
Credits	**16**
Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

Upon completion of the Communication Arts program, students will be able to:

- Analyze how creativity, artistry, narrative, identity, persuasion, and ethics shape messages and relationships produced within a variety of social, organizational, and industry contexts.
- Demonstrate knowledge and skills that give them expertise and proficiency in areas such as human relations, social media, digital video, audio production, graphic design, writing, and speaking.
- Know the history of communication practices and understand how media technologies and messages have impacted societies, cultures, organizations, and businesses.
- Effectively research and creatively explore communication practices, experiences, and trends using high quality sources of information, multiple modes of inquiry, and multiple presentation formats.
- Identify professional interests or career paths by working with the Internship and Career Planning Office and by engaging with communication settings outside the classroom through internships, service learning, field trips, and independent studies.

Communication Arts Major: Digital Media Option (B.A.)

https://manchester.unh.edu/program/ba/communication-arts-major-digital-media-option

Description

Students choosing the Digital Media option use coursework and hands-on learning to explore the intersections of technology, creativity and artistry with a focus on audio, video and web-based media. Students gain a comprehensive overview of the different stages of a digital media project, from writing and pre-production through production and post-production. Courses cover topics such as web authoring and multimedia, audio and video production, social media and public relations, ethics and law in the digital age, and motion graphics. An internship in the area of digital media is required.

For more information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Communication Arts (CA) majors must complete 10 courses (40 credits) and maintain a minimum overall grade point average of 2.0 in the major. Transfer students must complete at least 20 credits in the Communication Arts major at UNH. Communication Arts majors may use up to two CMN and/or CA courses toward both the Communication Arts major and UNH Discovery Program requirements.

Code	Title	Credits
I. Required Core Courses [1]		
CMN 455	Introduction to Media Studies	4
CMN 456	Propaganda and Persuasion	4
CMN 457	Introduction to Language and Social Interaction	4
II. Selected Coursework [2]		
Select three courses from area A, two from area B, two from area C below.		28
Total Credits		**40**

[1] Students must earn a "C" or better in each course to satisfy CA degree requirements.

[2] Students must earn a "C-" or better in each course to satisfy CA degree requirements.

Code	Title	Credits
A. Communication Practices		
Select three courses from the following:		12
CA 450	Introduction to Public Speaking	
CA 500	Media Writing	
CA 501	Internship/Communication in the Urban Community	
CA 502	Image and Sound	
CA 507	Relational Violence	
CA 508	Conflict in Relational Communication	
CA 512	Screenwriting	
CA 514	Fundamentals of Video Production	
CA 515	Advanced Video Production	
CA 517	Fundamentals of Audio Prod	
CA 520	Special Topics in Applied Communication	
CA 522	Graphic Design I	
CA 523	Graphic Design II	
PSYC 762	Counseling	
Total Credits		**12**

Code	Title	Credits
B. Communication Practices: Organization, History, and Policy		
Select two courses from the following:		8
CA 527	History of Film	
CA 531	History and Organization of Advertising	
CA 532	Typography I	
CA 536	LGBT Images and Perspectives	
CA 538	Gender	
CA 539	Communicating in Families	
CA 540	Public Relations	
CA 542	Social Media for Organizations and Business	
CA 550	Special Topics in Communication Organization, History, and Policy	
COMP 560	Ethics and the Law in the Digital Age	
ENGL 534	21st Century Journalism: How the News Works	
PHIL 565	Philosophy Through Film	
Total Credits		**8**

Code	Title	Credits
C. Communication Practices: Theory and Research		
Select two courses from the following:		8
CA 610	Communication Technologies and Culture	
CA 612	Narrative	
CA 615	Film History/Theory and Method	
CA 618	Documentary	
CA 720	Seminar	
CA 795	Independent Study	
Total Credits		**8**

Digital Media Option Requirements

The option in Digital Media consists of 24 credits as distributed below. Note that some courses may also be used to fulfill the requirements of the Communication Arts major. Courses applied to the option must be completed with a minimum grade of C- and overall GPA of 2.0. Transfer students must complete a minimum of 12 credits, including the Digital Media Internship, at UNH Manchester.

Code	Title	Credits
Digital Media Option		
Requirements		
Select three courses from the following (one must be COMP):		12
COMP 405	Introduction to Web Design and Development	
COMP 415	Mobile Computing First and For Most	
CA 500	Media Writing	
CA 514	Fundamentals of Video Production	
CA 515	Advanced Video Production	
CA 517	Fundamentals of Audio Prod	
CA 520	Special Topics in Applied Communication [1]	
Select one course from the following:		4
CA 531	History and Organization of Advertising	
CA 540	Public Relations	
CA 542	Social Media for Organizations and Business	
CA 550	Special Topics in Communication Organization, History, and Policy [1]	
COMP 560	Ethics and the Law in the Digital Age	
Select one course from the following:		4
CA 610	Communication Technologies and Culture	
CA 720	Seminar [1]	
CA 795	Independent Study [1]	
Complete one, four-credit Digital Media Internship with advisor approval		
CA 501	Internship/Communication in the Urban Community [1]	4
Total Credits		**24**

[1] Topic must be related to digital media

Capstone Requirement

The capstone requirement will be satisfied in a student's senior year by completion of a specific four-credit capstone course at the 600 or 700 levels. Students may not enroll in a capstone course until they have completed all three CA program core courses (CMN 455 Introduction to Media Studies, CMN 456 Propaganda and Persuasion, and CMN 457 Introduction to Language and Social Interaction) and at least one Area A course and one Area B course. Students must also have completed the prerequisites for the particular capstone course they seek to take. Exceptions to this rule must be approved by the student's academic advisor and CA program coordinator. The capstone course can also fulfill an Area C course requirement.

The capstone experience offers seniors an opportunity to synthesize and apply knowledge and skills gained throughout their communication arts major coursework. The capstone course requires students to conduct an original research study, a creative media project, an internship, community-based research, or an advanced service learning project in communication arts under the close supervision of a communication arts faculty member. Students are strongly encouraged to share their capstone projects with the larger UNH community through participation in the Undergraduate Research Conference, a presentation in the Brown Bag lunch series, publication in the UNH undergraduate journal *Inquiry*, or presentation in some other public venue. Students should work closely with their advisors to make sure the capstone requirement has been satisfied.

Courses that satisfy this requirement include, but are not limited to:

Code	Title	Credits
Capstone Courses		
CA 612	Narrative	4
CA 615	Film History/Theory and Method	4
CA 720	Seminar	4
CA 795	Independent Study	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
CMN 455	Introduction to Media Studies	4
Discovery Course		4
Elective		4
	Credits	**17-18**
Spring		
Quantitative Reasoning		4
CMN 456	Propaganda and Persuasion	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
CMN 457	Introduction to Language and Social Interaction	4
Major Elective		4
Discovery Course		4
	Credits	**16**
Spring		
Foreign Language		4
Major Elective		4
Major Elective		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

Upon completion of the Communication Arts program, students will be able to:

- Analyze how creativity, artistry, narrative, identity, persuasion, and ethics shape messages and relationships produced within a variety of social, organizational, and industry contexts.
- Demonstrate knowledge and skills that give them expertise and proficiency in areas such as human relations, social media, digital video, audio production, graphic design, writing, and speaking.
- Know the history of communication practices and understand how media technologies and messages have impacted societies, cultures, organizations, and businesses.
- Effectively research and creatively explore communication practices, experiences, and trends using high quality sources of information, multiple modes of inquiry, and multiple presentation formats.
- Identify professional interests or career paths by working with the Internship and Career Planning Office and by engaging with communication settings outside the classroom through internships, service learning, field trips, and independent studies.

Communication Arts Major: Human Relations Option (B.A.)

https://manchester.unh.edu/program/ba/communication-arts-major-human-relations-option

Description

Students choosing the Communication Arts Human Relations option explore practical, theoretical, and historical perspectives on the study of human relationships in professional and personal contexts. With so many of today's employers emphasizing the value of human communication skills in potential employees, the Human Relations Option offers students the knowledge and hands-on learning they need to develop their oral and written communication skills, as well as their ability to work in teams. Coursework covers topics such as verbal and nonverbal communication, perception, identity, conflict, human resource management, power, health, social psychology, human development, and counseling. An internship in the area of human relations is required.

For more information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Communication Arts (CA) majors must complete 10 courses (40 credits) and maintain a minimum overall grade point average of 2.0 in the major. Transfer students must complete at least 20 credits in the Communication Arts major at UNH. Communication Arts majors may use up to two CMN and/or CA courses toward both the Communication Arts major and UNH Discovery Program requirements.

Code	Title	Credits
I. Required Core Courses [1]		
CMN 455	Introduction to Media Studies	4
CMN 456	Propaganda and Persuasion	4
CMN 457	Introduction to Language and Social Interaction	4
II. Selected Coursework [2]		
Select three courses from area A, two from area B, two from area C below.		28
Total Credits		**40**

1. Students must earn a "C" or better in each course to satisfy CA degree requirements.
2. Students must earn a "C-" or better in each course to satisfy CA degree requirements.

Code	Title	Credits
A. Communication Practices		
Select three courses from the following:		12
CA 450	Introduction to Public Speaking	
CA 500	Media Writing	
CA 501	Internship/Communication in the Urban Community	
CA 502	Image and Sound	
CA 507	Relational Violence	
CA 508	Conflict in Relational Communication	
CA 512	Screenwriting	
CA 514	Fundamentals of Video Production	
CA 515	Advanced Video Production	
CA 517	Fundamentals of Audio Prod	
CA 520	Special Topics in Applied Communication	
CA 522	Graphic Design I	
CA 523	Graphic Design II	
PSYC 762	Counseling	
Total Credits		**12**

Code	Title	Credits
B. Communication Practices: Organization, History, and Policy		
Select two courses from the following:		8
CA 527	History of Film	
CA 531	History and Organization of Advertising	
CA 532	Typography I	
CA 536	LGBT Images and Perspectives	
CA 538	Gender	
CA 539	Communicating in Families	
CA 540	Public Relations	
CA 542	Social Media for Organizations and Business	
CA 550	Special Topics in Communication Organization, History, and Policy	
COMP 560	Ethics and the Law in the Digital Age	
ENGL 534	21st Century Journalism: How the News Works	
PHIL 565	Philosophy Through Film	
Total Credits		**8**

Code	Title	Credits
C. Communication Practices: Theory and Research		
Select two courses from the following:		8
CA 610	Communication Technologies and Culture	
CA 612	Narrative	
CA 615	Film History/Theory and Method	
CA 618	Documentary	
CA 720	Seminar	
CA 795	Independent Study	
Total Credits		**8**

Human Relations Option Requirements

The option in Human Relations consists of 24 credits as distributed below. Note that some courses may also be used to fulfill the requirements of the Communication Arts major. Courses applied to the option must be completed with a minimum grade of C- and overall GPA of 2.0. Transfer students must complete a minimum of 12 credits, including the Human Relations Internship, at UNH Manchester.

Code	Title	Credits
Human Relations Option		
Requirements		
Select four courses from the following: [1]		16
ANTH 411	Global Perspectives on the Human Condition: An Introduction to Anthropology	
CA 507	Relational Violence	
CA 508	Conflict in Relational Communication	
CA 520	Special Topics in Applied Communication [2]	
CA 538	Gender	
CA 539	Communicating in Families	
CA 542	Social Media for Organizations and Business	
CA 550	Special Topics in Communication Organization, History, and Policy [2]	
INTR 438	A Socio-cultural Perspective on the Deaf Community	
PSYC 401	Introduction to Psychology	
PSYC 552	Social Psychology	
PSYC 581	Child Development	
PSYC 762	Counseling	
PSYC 791W	Special Topics [2]	
Select one course from the following:		4
CA 612	Narrative	
CA 720	Seminar [2]	
CA 795	Independent Study [2]	
Select one course from the following:		4
CA 501	Internship/Communication in the Urban Community [2]	
UMST 500	Internship [2]	
Total Credits		**24**

1. At least two courses must be above the 400 level.
2. Topic must be related to Human Relations.

Capstone Requirement

The capstone requirement will be satisfied in a student's senior year by completion of a specific four-credit capstone course at the 600 or 700 levels. Students may not enroll in a capstone course until they have completed all three CA program core courses (CMN 455 Introduction to Media Studies, CMN 456 Propaganda and Persuasion, and CMN 457 Introduction to Language and Social Interaction) and at least one Area A course and one Area B course. Students must also have completed the prerequisites for the particular capstone course they seek to take. Exceptions to this rule must be approved by the student's academic

advisor and CA program coordinator. The capstone course can also fulfill an Area C course requirement.

The capstone experience offers seniors an opportunity to synthesize and apply knowledge and skills gained throughout their communication arts major coursework. The capstone course requires students to conduct an original research study, a creative media project, an internship, community-based research, or an advanced service learning project in communication arts under the close supervision of a communication arts faculty member. Students are strongly encouraged to share their capstone projects with the larger UNH community through participation in the Undergraduate Research Conference, a presentation in the Brown Bag lunch series, publication in the UNH undergraduate journal *Inquiry*, or presentation in some other public venue. Students should work closely with their advisors to make sure the capstone requirement has been satisfied.

Courses that satisfy this requirement include, but are not limited to:

Code	Title	Credits
Capstone Courses		
CA 612	Narrative	4
CA 615	Film History/Theory and Method	4
CA 720	Seminar	4
CA 795	Independent Study	4

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
CMN 455	Introduction to Media Studies	4
Discovery Course		4
Elective		4
	Credits	**17-18**
Spring		
Quantitative Reasoning		4
CMN 456	Propaganda and Persuasion	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
CMN 457	Introduction to Language and Social Interaction	4
Major Elective		4
Discovery Course		4
	Credits	**16**
Spring		
Foreign Language		4
Major Elective		4
Major Elective		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Major Elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

Upon completion of the Communication Arts program, students will be able to:

- Analyze how creativity, artistry, narrative, identity, persuasion, and ethics shape messages and relationships produced within a variety of social, organizational, and industry contexts.
- Demonstrate knowledge and skills that give them expertise and proficiency in areas such as human relations, social media, digital video, audio production, graphic design, writing, and speaking.
- Know the history of communication practices and understand how media technologies and messages have impacted societies, cultures, organizations, and businesses.
- Effectively research and creatively explore communication practices, experiences, and trends using high quality sources of information, multiple modes of inquiry, and multiple presentation formats.
- Identify professional interests or career paths by working with the Internship and Career Planning Office and by engaging with communication settings outside the classroom through internships, service learning, field trips, and independent studies.

Communication Arts Minor

https://manchester.unh.edu/program/minor/communication-arts

Description

The communication arts minor allows students in other majors to broaden their understanding of human communication while also developing deeper knowledge and practical skills that can enhance their professional lives and complement their major field of study.

Requirements

The communication arts minor requires completion of five courses (20 credits), as outlined below. A minimum GPA of 2.0 in minor courses is required, with no individual grade lower than a C-. Courses used to satisfy Discovery Program requirements may be used to satisfy CA minor requirements. Students should work with their advisor to ensure that any prerequisites for CA courses have been met, or that permission to enter the course has been granted by the course instructor.

Academic policies related to Minors.

Code	Title	Credits
I. Breadth Courses		
Select any two of the following, as long as they are NOT from the same category:		8
Category A:		
CMN 457	Introduction to Language and Social Interaction	
Category B:		
CMN 455	Introduction to Media Studies	
CA 502	Image and Sound	
Category C:		
CMN 456	Propaganda and Persuasion	
CA 450	Introduction to Public Speaking	
II. Depth Courses		
Select any three 500-level (or above) CA courses: [1]		12
Total Credits		**20**

[1] Except CA 501 Internship/Communication in the Urban Community

Note: Students who use CA 502 Image and Sound as a "breadth" course may not use it as a "depth" course.

Computing

The undergraduate computing programs in the Applied Engineering and Sciences Department at UNH Manchester prepare students for successful careers in computer science and information technology and further education in computing-related graduate studies. In our computing programs, students learn computing principles and computational practices to understand how computing machineries, including networks and clouds, work; design and build efficient systems; and apply computations and tools to develop and operate next generation of computing applications.

Programs

- Applied Computing Minor (p. 668)
- Computer Information Systems Major (B.S.) (p. 668)
- Computer Science Major (B.A.) (p. 670)

Faculty

Computing Faculty

Applied Computing Minor

https://manchester.unh.edu/program/minor/applied-computing

Description

Fusing the theory and application of computer science, the applied computing minor develops technical knowledge and real-world skills in IT, programming languages, web development and more. Applied computing focuses on critical thinking and problem solving, which prepares students from all majors with skills that can contribute to the mission of virtually any organization.

Requirements

Academic policies related to Minors.

- The minor requires five COMP courses (20 credits) as outlined below.
- Students must earn grades of at least C- in each course and maintain an overall GPA of 2.0 in minor courses.

Code	Title	Credits
Required Courses		
COMP 405	Introduction to Web Design and Development	4
or COMP 415	Mobile Computing First and For Most	
COMP 424	Applied Computing 1: Foundations of Programming	4
COMP 525	Data Structures Fundamentals	4
Select two courses from the following:		8
COMP 430	Systems Fundamentals	
COMP 500	Discrete Structures	
COMP 520	Database Design and Development	
COMP 530	Machine and Network Architecture	
COMP 625	Data Structures and Algorithms	
Total Credits		**20**

Computer Information Systems Major (B.S.)

https://manchester.unh.edu/program/bs/computer-information-systems-major

Description

The computer information systems (CIS) or information technology (IT) field, in its broadest sense, encompasses all aspects of computing technology. During their program of study, students develop a strong skillset to effectively select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals.

The bachelor of science degree in Computer Information Systems prepares graduates with knowledge, skills, and professional practices to work in the highly integrated field of computing and to grow into leadership positions. The program also enables graduates to further their studies at the graduate level and pursue research in a computing-related discipline.

Career opportunities for students with an undergraduate CIS degree are varied, but may include such areas as software applications developer, data security specialist, database developer/administrator, e-commerce analyst/programmer, help desk manager, multimedia developer, network/system administrator, technical writer, technology trainer, user support specialist, testing and quality assurance specialist, or web developer. Career options exist in a wide range of organizations as all businesses, industries, and nonprofits continue to use, develop, and integrate information technology solutions.

Program Educational Objectives

Within five years of graduation, a CIS student should be able to:

- Apply knowledge and skills in core and advanced information technologies to help an organization achieve its goals.
- Advocate for users of information technologies, whether they are end users of information systems, managers of enterprise applications, developers of IT solutions, or customers of IT-reliant work systems.
- Develop, manage, and evaluate computing and communication systems and services.
- Live and work as contributing, well-rounded members of society.

For additional information contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students majoring in computer information systems must complete 128 credits to graduate, satisfy the University's Discovery Program, and complete 81 credits in the major with a minimum of C- in each course. Students must maintain an overall cumulative GPA of 2.0 or better.

Transfer students who elect to major in computer information systems must earn 81 approved credits for completion of the their major, of which at least 24 credits must be completed at UNH Manchester.

Code	Title	Credits
Required Mathematics Course [1]		
Select one of the following:		4
MATH 420	Finite Mathematics	
MATH 422	Mathematics for Business Applications	
MATH 424B	Calculus for Life Sciences	
MATH 425	Calculus I	
COMP 500	Discrete Structures	
Computing Core		
COMP 405	Introduction to Web Design and Development	4
COMP 424	Applied Computing 1: Foundations of Programming	4
COMP 430	Systems Fundamentals	4
COMP 525	Data Structures Fundamentals	4
COMP 530	Machine and Network Architecture	4
COMP 560	Ethics and the Law in the Digital Age	4
Applied Computing Technology		
COMP 715	Information Security	4
or COMP 785	Applied Cryptography	
COMP 720	Database Systems and Technologies	4
COMP 730	Software Development	4
COMP 735	Secure Networking Technology	4
Project and Professional Practice [2]		
UMST 582	Internship and Career Planning Seminar	1
COMP 690	Internship Experience	4
COMP 790	Capstone Project	4
or COMP 791	Senior Thesis	
Computing Topics [3]		
Select three computing courses		12
Concentration to Broaden and Advance Student Learning of Computing Innovations [4]		
Select four courses		16
Total Credits		**81**

1. Any of these courses, except for COMP 500 Discrete Structures, may be used to satisfy the Quantitative Reasoning Discovery requirement.
2. The program prepares students for the workforce and further education in a holistic way by emphasizing communication, collaboration, team work, initiative, appreciation for diversity, and self-direction and responsibility.
3. Advisor permission required.
4. Majors can creatively design a concentration of courses that meet their academic and professional goals and career plans. Four courses can be selected across a wide university curriculum, reflecting majors' interests in a liberal arts, scientific, engineering, interdisciplinary, or professional area of study. The concentration must be approved by the student's advisor before the student's junior year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
COMP 405	Introduction to Web Design and Development	4
ENGL 401	First-Year Writing	4
MATH 420 or MATH 422 or MATH 425 or COMP 500	Finite Mathematics or Mathematics for Business Applications or Calculus I or Discrete Structures	4
UMST 401	First Year Seminar	2
Discovery Course		4
	Credits	**18**
Spring		
COMP 424	Applied Computing 1: Foundations of Programming	4
COMP 430	Systems Fundamentals	4

Discovery Course		4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
COMP 525	Data Structures Fundamentals	4
COMP 530	Machine and Network Architecture	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Spring		
COMP 560	Ethics and the Law in the Digital Age	4
COMP 735	Secure Networking Technology	4
Concentration Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
UMST 582	Internship and Career Planning Seminar	1
COMP 720	Database Systems and Technologies	4
COMP 730	Software Development	4
Concentration Course		4
Elective Course		4
	Credits	**17**
Spring		
COMP 690	Internship Experience	4
COMP Topic Course		4
Concentration Course		4
Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
COMP 715	Information Security	4
COMP Topic Course		4
Concentration Course		4
Elective Course		4
	Credits	**16**
Spring		
COMP 790	Capstone Project	4
COMP Topic Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**131**

Student Learning Outcomes

Program Learning Outcomes

- Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Use systemic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals.

The student learning outcomes are aligned with criteria for accrediting information technology programs as recommended by the ABET Computing Accreditation Commission and the ACM Computing Curricula – IT 2017 Information Technology guidelines.

Computer Science Major (B.A.)

https://manchester.unh.edu/program/ba/computer-science

Description

The computer science program combines a solid foundation in computing necessary to succeed in today's start-up and high-tech environments. The program is designed in response to market demand for students proficient in computer science.

Students in the computer science program gain real-world experience through extensive project work and opportunities to interact with industry experts through internships and sponsored research.

Career prospects for students with an undergraduate computer science degree are varied, and may include such areas as applications developer, computer and information research scientist, data security specialist, database administrator, database developer, multimedia developer, network architect, product development manager, quality assurance analyst, software systems developer, user experience designer, or web developer.

Program Educational Objectives

Within five years of graduation, a CS student should be able to:

- Demonstrate mastery of the core areas of computer science
- Invent, develop, manage, and evaluate computing systems and services
- Exercise professional responsibility and have appreciation of the social, legal, ethical, and cultural issues inherent in the computing field.

For additional information contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu), (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students majoring in computer science must complete 128 credits to graduate, satisfy the University's Discovery Program, and complete 69 credits in the major with a minimum of C- in each course. Students must maintain an overall cumulative GPA of 2.0 or better.

Transfer students who elect to major in computer science must earn 69 approved credits for completion of the major, of which at least 24 credits must be completed at UNH Manchester.

Code	Title	Credits
Mathematics and Science [1]		
COMP 500	Discrete Structures	4
COMP 570	Statistics in Computing and Engineering	4
MATH 425	Calculus I	4
MATH 645	Linear Algebra for Applications	4
PHYS 407	General Physics I	4
Computing Core		
COMP 415	Mobile Computing First and For Most	4
COMP 424	Applied Computing 1: Foundations of Programming	4
COMP 430	Systems Fundamentals	4
COMP 525	Data Structures Fundamentals	4
COMP 530	Machine and Network Architecture	4
COMP 560	Ethics and the Law in the Digital Age	4
COMP 625	Data Structures and Algorithms	4
COMP 630	Systems Software	4
Project and Professional Practice [2]		
COMP 690	Internship Experience	4
COMP 790	Capstone Project	4
or COMP 791	Senior Thesis	
UMST 582	Internship and Career Planning Seminar	1
Computing Topics [3]		**8**
Select two from the following:		
COMP 705	Full Stack Development	
COMP 720	Database Systems and Technologies	
COMP 725	Programming Languages	
COMP 740	Machine Learning Applications and Tools	
COMP 785	Applied Cryptography	
Total Credits		**69**

1. The program requires four mathematics courses and one physics course.
2. The program prepares students for the workforce and further education in a holistic way by emphasizing communication, collaboration, team work, initiative, appreciation for diversity, and self-direction and responsibility.
3. Advisor permission required.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
COMP 424	Applied Computing 1: Foundations of Programming	4
ENGL 401	First-Year Writing	4
MATH 425	Calculus I	4
UMST 401	First Year Seminar	2
Discovery Course		4
	Credits	**18**
Spring		
COMP 415	Mobile Computing First and For Most	4
COMP 430	Systems Fundamentals	4
COMP 570	Statistics in Computing and Engineering	4
PHYS 407	General Physics I	4
	Credits	**16**
Second Year		
Fall		
COMP 500	Discrete Structures	4
COMP 525	Data Structures Fundamentals	4
Discovery Course		4
Foreign Language		4
	Credits	**16**
Spring		
COMP 530	Machine and Network Architecture	4
COMP 560	Ethics and the Law in the Digital Age	4
MATH 645	Linear Algebra for Applications	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
COMP 625	Data Structures and Algorithms	4
UMST 582	Internship and Career Planning Seminar	1
Discovery Course		4
Elective Course		4
Elective Course		4
	Credits	**17**
Spring		
COMP 630	Systems Software	4
COMP 690	Internship Experience	4
Discovery Course		4
Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
COMP Topic Course		4

COMP Topic Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Spring		
COMP 790	Capstone Project	4
Elective Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
	Total Credits	**131**

Student Learning Outcomes

Program Learning Outcomes

- Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply computer science theory and software development fundamentals to produce computing-based solutions.

The student learning outcomes are aligned with criteria for accrediting computer science programs as recommended by the ABET Computing Accreditation Commission and the ACM Computing Curricula – CS 2013 Computer Science guidelines.

Engineering Technology

With topics including communications theory, digital signal processing, analog systems, and digital systems. The ABET-accredited **Electrical Engineering Technology** program gives you the practical experience to meet both industry demand and your career goals. Small class sizes mean opportunities to collaborate with faculty who are industry experts, giving you one-on-one attention to excel in the dynamic, highly rewarding field of electronics.

From advanced manufacturing concepts to complex machine design, the ABET-accredited **Mechanical Engineering Technology** program will ignite your fascination with how things work. You'll work alongside faculty experts to learn mechanical design, fluid/thermal technology, production systems, automation engineering and more. Through hands-on experience in the classroom and in the field, this applied degree program gives you the practical experience to turn your passion into a career.

The **Computer Engineering Technology** program blends hardware and software expertise, preparing you to design, test and maintain cutting-edge computer firmware. With hands-on experience and industry-aligned coursework, you'll graduate ready to meet the demand for skilled computer engineers in fields like embedded systems, networking, digital signal processing and more.

Programs

- Computer Engineering Technology Major (B.S.) (p. 672)
- Electrical Engineering Technology Major (B.S.) (p. 674)
- Mechanical Engineering Technology Major (B.S.) (p. 675)

Faculty

Engineering Technology Faculty

Computer Engineering Technology Major (B.S.)

https://manchester.unh.edu/program/bs/computer-engineering-technology-major

Description

Computer Engineering Technology (CET) is the fusion of hardware and software engineering, focusing on the design, development and testing of computer firmware. Unlike traditional electrical engineering, CET emphasizes both programming and digital hardware, preparing graduates to work with microcontrollers, networking and system architecture. This discipline is essential in industries like telecommunications, automation and cybersecurity, where professionals bridge the gap between electronics and computing solutions.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Courses required in the major must be completed with a minimum grade of C- and students must attain a minimum GPA in the major of 2.0.

Code	Title	Credits
Required Courses		
COMP 424	Applied Computing 1: Foundations of Programming	4
COMP 525	Data Structures Fundamentals	4
COMP 530	Machine and Network Architecture	4
COMP 550	Networking Concepts	4
COMP 560	Ethics and the Law in the Digital Age	4
COMP 625	Data Structures and Algorithms	4
COMP 720	Database Systems and Technologies	4

ECN 411/411W	Introduction to Macroeconomic Principles	4
or ECN 412/412W	Introduction to Microeconomic Principles	
ET 421	Digital Electronics I	4
ET 660	FPGA Design with HDL	4
ET 431	Circuit Analysis I	4
ET 432	Circuit Analysis II	4
ET 522	Digital Electronics II	4
ET 541	Electronic Devices	4
ET 590	Embedded Microcontrollers	4
ET 625	Technical Communications	4
ET 671	Digital Systems	4
ET 680	Communications and Fields	4
ET 788	Introduction to Digital Signal Processing	4
ET 791	Electrical Engineering Technology Project	8
MATH 425	Calculus I	4
MATH 426	Calculus II	4
PHYS 407	General Physics I	4
Elective		
COMP Elective: Select any COMP course 500-level (or higher) not already required.		4
Total Credits		**100**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
MATH 418	Analysis and Applications of Functions	4
ENGL 401	First-Year Writing	4
ET 431	Circuit Analysis I	4
COMP 424	Applied Computing 1: Foundations of Programming	4
	Credits	**16**
Spring		
MATH 425	Calculus I	4
ET 421	Digital Electronics I	4
ET 432	Circuit Analysis II	4
COMP 550	Networking Concepts	4
	Credits	**16**
Second Year		
Fall		
MATH 426	Calculus II	4
ET 522	Digital Electronics II	4
ET 541	Electronic Devices	4
COMP 525	Data Structures Fundamentals	4
	Credits	**16**
Spring		
ET 590	Embedded Microcontrollers	4
PHYS 407	General Physics I	4
COMP 530	Machine and Network Architecture	4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
ET 680	Communications and Fields	4
ET 671	Digital Systems	4
COMP Elective		4
Discovery Course		4
	Credits	**16**
Spring		
ET 625	Technical Communications	4
ET 660	FPGA Design with HDL	4
COMP 625	Data Structures and Algorithms	4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
COMP 560	Ethics and the Law in the Digital Age	4
COMP 720	Database Systems and Technologies	4
ET 791	Electrical Engineering Technology Project	4
Discovery Course		4
	Credits	**16**
Spring		
ECON 401	Principles of Economics (Macro)	4
ET 791	Electrical Engineering Technology Project	4
ET 788	Introduction to Digital Signal Processing	4
Discovery Course		4
	Credits	**16**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

General Engineering Technology

- Problem Solving: an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
- System Design: an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
- Communication Skills: an ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
- Testing, Measurements, and Interpretation: an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
- Teamwork: an ability to function effectively as a member as well as a leader on technical teams.

Computer Engineering Technology

- Application of electric circuits, computer programming, associated software applications, analog and digital electronics, microcontrollers, operating systems, local area networks, and

engineering standards to the building, testing, operation, and maintenance of computer systems and associated software systems.
- Application of natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of computer systems and associated software systems.
- Analysis, design, and implementation of computer system hardware and software.
- Application of project management techniques to computer systems.
- Utilization of statistics/probability, transform methods, discrete mathematics, or applied differential equations in support of computer systems and networks.

Electrical Engineering Technology Major (B.S.)

https://manchester.unh.edu/program/bs/electrical-engineering-technology-major

Description

Engineering technology requires the application of engineering and scientific knowledge and methods combined with technical skills in support of engineering activities. Graduates may work in a variety of areas including engineering design, manufacturing, field service, testing, and sales and may work in management positions related to engineering, manufacturing, and computer technology.

The UNH Manchester BS in Electrical Engineering Technology is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, www.abet.org.

The programs at UNH Manchester are designed to meet the needs of both full- and part-time students with a mix of classes scheduled during the day and in the evening.

For more information, contact the Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Each course required in the major must be completed with a minimum grade of C-. Students must attain a minimum GPA in the major of 2.0.

Code	Title	Credits
Required Courses		
CHEM 405	Chemical Principles for Engineers	4
COMP 424	Applied Computing 1: Foundations of Programming	4
COMP 560	Ethics and the Law in the Digital Age	4
ECN 411	Introduction to Macroeconomic Principles	4
ET 421	Digital Electronics I	4
ET 431	Circuit Analysis I	4
ET 432	Circuit Analysis II	4
ET 522	Digital Electronics II	4
ET 541	Electronic Devices	4
ET 542	Analog Electronics	4
ET 590	Embedded Microcontrollers	4
ET 625	Technical Communications	4
ET 671	Digital Systems	4
ET 674	Control Systems and Components	4
ET 677	Analog Systems	4
ET 680	Communications and Fields	4
ET 781	Introduction to Automation Engineering	4
ET 788	Introduction to Digital Signal Processing	4
ET 790	Microcomputer Technology	4
ET 791	Electrical Engineering Technology Project (Senior Capstone Project) [1]	8
MATH 425	Calculus I	4
MATH 426	Calculus II	4
PHYS 407	General Physics I	4
Discovery Program Requirements, Writing Intensive (WI) Requirement, and electives		
Total Credits		**96**

[1] Senior Capstone Project, two semesters; satisfies the Discovery Senior Capstone Experience requirement.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
MATH 418	Analysis and Applications of Functions	4
COMP 424	Applied Computing 1: Foundations of Programming	4
ET 431	Circuit Analysis I	4
	Credits	**16**
Spring		
PHYS 407	General Physics I	4
ET 421	Digital Electronics I	4
MATH 425	Calculus I	4
ET 432	Circuit Analysis II	4
	Credits	**16**
Second Year		
Fall		
CHEM 405	Chemical Principles for Engineers	4
MATH 426	Calculus II	4
ET 522	Digital Electronics II	4
ET 541	Electronic Devices	4
	Credits	**16**
Spring		
ET 542	Analog Electronics	4

ET 590	Embedded Microcontrollers	4
Discovery Course		4
Elective Course		4
	Credits	**16**
Third Year		
Fall		
ET 671	Digital Systems	4
ET 674	Control Systems and Components	4
ET 680	Communications and Fields	4
Discovery Course		4
	Credits	**16**
Spring		
ET 625	Technical Communications	4
ET 677	Analog Systems	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
COMP 560	Ethics and the Law in the Digital Age	4
ET 790	Microcomputer Technology	4
ET 791	Electrical Engineering Technology Project	4
Discovery Course		4
	Credits	**16**
Spring		
ECN 411	Introduction to Macroeconomic Principles	4
ET 781	Introduction to Automation Engineering	4
ET 788	Introduction to Digital Signal Processing	4
ET 791	Electrical Engineering Technology Project	4
	Credits	**16**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

Engineering Technology program, the student outcomes must include, but are not limited to, the following learned capabilities:

- An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
- An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
- An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- An ability to function effectively as a member as well as a leader on technical teams.

Mechanical Engineering Technology Major (B.S.)

https://manchester.unh.edu/program/bs/mechanical-engineering-technology-major

Description

Engineering technology requires the application of engineering and scientific knowledge and methods combined with technical skills in support of engineering activities. Graduates may work in a variety of areas including engineering design, manufacturing, field service, testing, and sales and may work in management positions related to engineering, manufacturing, and technology.

The UNH Manchester BS in Mechanical Engineering Technology is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET.

The programs at UNH Manchester are designed to meet the needs of both full- and part-time students with a mix of classes scheduled during the day and in the evening.

For information contact, the Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Courses required in the major must be completed with a minimum grade of C-. Students must attain a minimum GPA in the major of 2.0.

Code	Title	Credits
COMP 424	Applied Computing 1: Foundations of Programming	4
COMP 560	Ethics and the Law in the Digital Age	4
ECN 411	Introduction to Macroeconomic Principles	4
ET 405	Engineering Design	4
ET 411	Manufacturing and Materials Processing	4
ET 450	Statics and Strength of Materials	4
ET 502	Measurement and Control	4
ET 505	Material Science	4
ET 550	Dynamics and Machine Design I	4
ET 560	Machine Design II	4
ET 625	Technical Communications	4
ET 635	Fluid Technology and Heat Transfer	4
ET 641	Production Systems	4
ET 644	Mechanical Engineering Technology Concepts in Analysis and Design	4
ET 645	Fluid Technology and Heat Transfer II	4

ET 674	Control Systems and Components	4
ET 675	Electrical Technology	4
ET 751	Mechanical Engineering Technology Project	8
ET 781	Introduction to Automation Engineering	4
PHYS 407	General Physics I	4
PHYS 408	General Physics II	4
MATH 425	Calculus I	4
MATH 426	Calculus II	4
CHEM 405	Chemical Principles for Engineers	4
Discovery Program Requirements, Writing Intensive (WI) Requirement, and electives		
Total Credits		**100**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
CHEM 405	Chemical Principles for Engineers	4
ET 405	Engineering Design	4
MATH 418	Analysis and Applications of Functions	4
	Credits	**16**
Spring		
PHYS 407	General Physics I	4
ET 411	Manufacturing and Materials Processing	4
MATH 425	Calculus I	4
ET 450	Statics and Strength of Materials	4
	Credits	**16**
Second Year		
Fall		
PHYS 408	General Physics II	4
MATH 426	Calculus II	4
ET 502	Measurement and Control	4
ET 550	Dynamics and Machine Design I	4
	Credits	**16**
Spring		
ET 505	Material Science	4
ET 560	Machine Design II	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
COMP 424	Applied Computing 1: Foundations of Programming	4
ET 635	Fluid Technology and Heat Transfer	4
ET 641	Production Systems	4
Discovery Course		4
	Credits	**16**
Spring		
ET 625	Technical Communications	4
ET 645	Fluid Technology and Heat Transfer II	4
ET 675	Electrical Technology	4
Discovery Course		4
	Credits	**16**
Fourth Year		
Fall		
ECN 411	Introduction to Macroeconomic Principles	4
ET 674	Control Systems and Components	4
ET 751	Mechanical Engineering Technology Project	4
Discovery Course		4
	Credits	**16**
Spring		
COMP 560	Ethics and the Law in the Digital Age	4
ET 644	Mechanical Engineering Technology Concepts in Analysis and Design	4
ET 751	Mechanical Engineering Technology Project	4
ET 781	Introduction to Automation Engineering	4
	Credits	**16**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

The Engineering Technology program student outcomes include, but are not limited to, the following learned capabilities:

- An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
- An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
- An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- An ability to function effectively as a member as well as a leader on technical teams.

English Studies

- English Minor (Manchester) (p. 676)
- English Studies: Literary Studies Major (B.A.) (p. 677)

English Minor (Manchester)

https://manchester.unh.edu/program/minor/english

Description

With a minor in English, you can complement your major with five classes from our areas of study. We think you'll find that even subjects that seem far apart have an uncanny way of intersecting.

In our literature courses, you might read and research a novel about bioengineering, even as our writing classes give you an opportunity to study the many genres of creative and occupational writing. English study expands your portfolio of transferable skills while keeping your imaginative faculties in high gear.

Employers from across the professional spectrum are looking for employees with skill sets that include those of an English minor—for instance, the ability to think critically, parse challenging texts, and express new ideas persuasively and creatively. You'll be amazed at what an English minor can do for you both personally and professionally.

Requirements

Academic policies related to Minors.

To minor in English at UNH Manchester, students must complete five courses (20 credits).

Code	Title	Credits
Required Courses		
ENGL 419	How to Read Anything	4
Electives [1]		16
Total Credits		**20**

1. ENGL 401 First-Year Writing and ENGL 415s, "Literature and..." courses and ENGL 444s cannot be applied toward the English minor. No more than two transfer courses may be applied toward the English minor. The minimum acceptable grade for each course is C-.

English Studies: Literary Studies Major (B.A.)

https://manchester.unh.edu/program/ba/literary-studies-major

Description

Beginning in the 2025-2026 academic year, the English Studies: Literary Studies major will no longer be accepting new students. Current English Studies: Literary Studies students will continue to have access to the same high-quality education and resources until they graduate.

Students in the English Studies: Literary Studies program advance their power to analyze keenly and write incisively by studying leading-edge and foundational literary works in print, graphic and digital forms. Gaining a mastery of aesthetics and genre, literary theory and cultural history, our students learn to see how language shapes the world on every scale. English Studies: Literary Studies students take an array of literature classes as well as core courses in digital creative writing and professional and technical communication, making them just the sort of versatile, critically aware graduates prized in workplaces today.

For more information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

For the English Studies: Literary Studies program at UNH Manchester, students must complete a minimum of 128 credits and satisfy the University's Discovery Program and foreign language requirements, and complete a minimum of 40 credits in major coursework with a minimum grade of C-. The major requirements consist of a minimum of 10 courses. These 10 courses (40 credits) must include the capstone requirement.

Students must earn C- or higher in ENGL 419 How to Read Anything, ENGL 502 Professional and Technical Writing, and ENGL 595 Literary Topics in order for these classes to count towards the major.

Code	Title	Credits
Core Courses		
ENGL 419	How to Read Anything	4
ENGL 502	Professional and Technical Writing	4
ENGL 595	Literary Topics (Digital Creative Writing)	4
Development/Extension [1]		
Select three courses of the following:		12
Any 500 or 600-level ENGL courses in literature, literary theory, poetics, or narrative		
Specialization/Practice [1]		
ENGL 787	English Major Seminar [2]	4
ENGL 797	Special Studies in Literature [3]	4
Select two courses of the following:		8
Any 600 or 700 level ENGL electives in literature, literary theory, poetics, or narrative		
Total Credits		**40**

1. Students must take *two* pre-1800 literature courses in the major. These courses can be taken either in Development/Extension OR Specialization/Practice categories OR from both categories.
2. Capstone course. Students must have earned 90 credits before taking the course.
3. Variable topic seminar colloquium.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
Discovery Course		4
Discovery Course		4
Elective		4
	Credits	**17-18**
Spring		
Quantitative Reasoning		4
ENGL 419	How to Read Anything	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
ENGL 502	Professional and Technical Writing	4
Major Elective		4
Discovery Course		4
	Credits	**16**
Spring		
Foreign Language		4
ENGL 595	Literary Topics (Digital Creative Writing)	4
Elective		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Any 500 or 600-level ENGL courses in literature, literary theory, poetics, or narrative		4
Any 600 or 700-level ENGL electives in literature, literary theory, poetics, or narrative		4
Discovery Course		4
Elective		4
	Credits	**16**
Spring		
Any 500 or 600-level ENGL courses in literature, literary theory, poetics, or narrative		4
Any 600 or 700-level ENGL electives in literature, literary theory, poetics, or narrative		4
Discovery Course		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
Any 500 or 600-level ENGL courses in literature, literary theory, poetics, or narrative		4
ENGL 787	English Major Seminar	4
Discovery Course		4
Elective		4
	Credits	**16**
Spring		
ENGL 797	Special Studies in Literature	4
Elective		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Produce clear, compelling, contextually appropriate and well-supported writing.
- Engage with writing as a rhetorical, collaborative, and recursive process from invention to product.
- Demonstrate versatility in writing and speaking within a variety of academic and professional contexts and platforms (including professional and vocational contexts in the form of internships and/or capstone projects).
- Expertly read and analyze texts--literary and non-literary--from diverse time periods, genres, and authorial perspectives.
- Recognize language as culturally, historically, and socially constructed.
- Adeptly use information literacy and technology skills.

English Teaching

Programs

- English Teaching Major (B.A.) Manchester (p. 678)

English Teaching Major (B.A.) Manchester

https://manchester.unh.edu/program/ba/english-teaching-major

Description

Beginning in the 2025-2026 academic year, the English Teaching major will no longer be accepting new students. Current English Teaching students will continue to have access to the same high-quality education and resources until they graduate.

Inspire others to share your love of reading and writing with our English Teaching program. Considered one of the region's best, our program gives you the tools, guidance and real-world experience for a rewarding career in English education.

Our faculty are not only master teachers but also thoughtful mentors to those seeking to become educators. They offer a diverse spectrum of expertise—from Shakespeare to 21st-century literature and media, from philosophies of teaching to deep knowledge of standards-based literacy instruction.

The Accelerated Master's program in Durham allows you to work on requirements for your Master of Arts in Teaching degree while still in the bachelor's program. Upon acceptance into the master's program, you can apply 12 undergraduate credits to the advanced degree. Once you've finished your B.A., you'll complete graduate-level coursework in the master's program and undertake a year-long teaching internship where you'll collaborate with a teacher to apply your knowledge in a classroom.

Students who complete the master's program are uniquely well prepared to become leaders in the profession over the long term. State certification is transferable to most other states, and, after five years, 88.7% of UNH master's program graduates report that they are teaching or employed in an education-related job. Join the English Teaching major and turn your passion for English into a fulfilling career serving your community!

For more information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

All English Teaching majors must complete 10 courses (40 credits). Six of 10 courses must be at the 600-level or above. The English Teaching major prepares prospective teachers of middle- and high-school English (grades 5-12). This degree does not provide state certification. Students who wish to be certified must apply for admission to graduate study within the Education Department. Certification requires an additional year of course work and internship at the graduate level. The graduate coursework and internship can typically be completed in the 12 months following completion of the B.A. in English Teaching.

- Prospective English Teaching majors should enroll in EDUC 500 Exploring Teaching in their sophomore year, or, if a transfer student, as soon as possible thereafter.
- ENGL 419 must be completed with a minimum grade of C. All other major courses must be completed with a minimum grade of C-.
- English Teaching majors must have a 2.5 GPA in the following program requirements:

Code	Title	Credits
Required Courses		
ENGL 419	How to Read Anything	4
ENGL 514W	British Literature III: Revolts, Renewals, Migrations [1]	4
ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	4
ENGL 657	Shakespeare	4
ENGL 710	Teaching Writing	4
ENGL 791	English Grammar	4
ENGL 792	Teaching Literature and Literacy	4
Select one additional 500/600/700-level English course		4
Select two additional 600/700-level literature courses		8
Total Credits		**40**

Diversity Requirement

Students must take one course that focuses on diversity in race, ethnicity, religion, gender or class, and theories concerning them. This course counts toward the ten courses described above. Consult with your advisor about courses that will fulfill this requirement.

Capstone Requirement

Students must take one capstone course during their senior year from any approved ENGL 700-level course in the major. Students must have earned 90 credits before taking the course. Consult with the program coordinator about courses that will fulfill this requirement.

[1] Cannot be repeated under different course title.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
Elective		4
Discovery Course		4
Discovery Course		4
	Credits	**17-18**
Spring		
Quantitative Reasoning		4
ENGL 419	How to Read Anything	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
EDUC 500	Exploring Teaching	4
ENGL 516W	American Literature II Money, Migration, and Modernity: Huck Finn to Beloved	4
Discovery Course		4
	Credits	**16**
Spring		
ENGL 514W	British Literature III: Revolts, Renewals, Migrations	4
Foreign Language		4
500/600/700-level English course		4
Discovery Course		4
	Credits	**16**

Third Year		
Fall		
ENGL 710	Teaching Writing	4
ENGL 657	Shakespeare	4
Discovery Course		4
Elective		4
	Credits	**16**
Spring		
600/700-level Literature course		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
ENGL 791	English Grammar	4
600/700-level Literature course		4
Discovery Course		4
Elective		4
	Credits	**16**
Spring		
ENGL 792	Teaching Literature and Literacy	4
Elective		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

Students will:

- Design activities, lessons, and units to meet established standards and objectives in writing and language use.
- Adapt materials for a variety of students' needs, including exceptional learners.
- Identify teaching resources among mentors, professional literature, conferences, organizations (e.g., National Council of Teachers of English [NCTE]), technology, and websites.
- Reflect and write on the theoretical bases for instructional decisions, evaluating professional literature and using appropriate academic conventions.
- Deliver engaging, on-point writing and language instruction appropriate to audience and content; practice a variety of presentation and discussion strategies.

General Studies

The Associate in Arts in General Studies offers students academic flexibility in a program that combines the foundations of a liberal arts education and elective courses that satisfy personal interests.

Programs

- General Studies (A.A.) Manchester (p. 680)

Faculty

https://manchester.unh.edu/directory/all

General Studies (A.A.) Manchester

https://manchester.unh.edu/program/aa/general-studies

Description

The associate of arts in general studies offers students academic flexibility in a program that combines the foundations of a liberal arts education and elective courses that satisfy personal interests. The A.A. in general studies is the first two years of a baccalaureate program, and all 400-level courses transfer to and fulfill the University's Discovery requirements. Students who earn an A.A. in general studies have a foundation for continued study in any major while they develop problem-solving skills, cognitive skills, and learning techniques that are vital to a lifetime of learning. Many students begin their college study in the A.A. general studies program. Depending on personal interests and academic goals, students may choose to apply to a baccalaureate degree program prior to completion of the A.A. degree.

For more information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 64 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

To graduate with an associate of arts degree in general studies, students must complete 64 credits, earn a minimum cumulative GPA of 2.0, and fulfill two types of requirements: University Discovery Program and degree requirements. The program includes nine courses from the Discovery Program core curriculum. Working with their advisors, students enhance their program of study with elective courses where they can explore their interests and possible baccalaureate degree majors. The last 16 credit hours must be UNH courses completed following admission and matriculation, unless permission is granted to transfer coursework from another institution.

Code	Title	Credits
Discovery Foundations		
Two writing-intensive courses, one of which must be:		8
ENGL 401	First-Year Writing	

One course in quantitative reasoning (must be completed within the first 32 credits)	4
One Inquiry or Inquiry attribute course (must be completed within the first 25 credits)	4
Discovery Categories	
Two courses from two of the following categories (one must be a lab course):	8
Biological Science	
Physical Science	
Environment, Technology, and Society	
One course in Historical Perspectives	4
One course in World Cultures or Fine and Performing Arts	4
One course in Social Science	4
One course in Humanities	4
Completion of the Interdisciplinary Core Requirement (may also fill the Humanities category requirement)	4
HUMA 411 Humanities I	
or HUMA 412 Humanities II	
Elective courses	**20**
Total Credits	**64**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
Elective		4
Discovery Course		4
Elective		4
	Credits	**17-18**
Spring		
Quantitative Reasoning Course		4
HUMA 411 or HUMA 412	Humanities I or Humanities II	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
Discovery Course		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Discovery Course		4
Elective		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**65-66**

Student Learning Outcomes

Program Learning Outcomes

- Students who earn an A.A. in general studies have a foundation for continued study in any major while they develop problem-solving skills, cognitive skills, and learning techniques that are vital to a lifetime of learning.

Homeland Security

Preparing innovative, dynamic problem-solvers for a safer tomorrow

Today's threat environment is complex and dynamic and includes catastrophic natural disasters, small- to large-scale attacks of violence or terrorism, cybersecurity challenges, climate change, and pandemics. The Homeland Security (HLS) program will give students the tools to help organizations, communities, and the nation be safe and resilient.

Programs

- Corporate Security Minor (p. 681)
- Cybersecurity Policy Minor (p. 682)
- Emergency Management Minor (p. 682)
- Homeland Security Major (B.S.) (p. 683)
- Homeland Security Minor (p. 684)
- National Security Intelligence Minor (p. 685)
- Terrorism Studies Minor (p. 685)

Faculty

Homeland Security Faculty

Corporate Security Minor

https://manchester.unh.edu/program/minor/corporate-security

Description

Security threats are all around us. Modern society has demonstrated that all organizations face risks from natural disasters, to disgruntled employees, to foreign terrorists groups such as the Islamic State or Al Qaeda, to domestic terrorists/criminals, to active shooters, cyber-attacks, bioterror threats such as EBOLA, SARS, and anthrax. Further, weather-related events such as Hurricanes Katrina and Sandy, or massive snow storms causing extended shut downs of businesses, tornadoes, earthquakes and potential flood and rain events are always possible and can be devastating to the financial solvency of any organization. Consequently, threats like these have changed how employers evaluate and manage risk.

The relatively rapid rise of the Corporate Security Officer (CSO) in the private sector indicates the deep commitment many organizations now have to enterprise risk management of security threats across all industrial sectors. Corporate security professionals (not "security guards") plan for future potential events, develop and implement risk management, preparedness and resilience strategies that avoid, transfer

or reduce the risk to the organization posed by these threats. The need for corporate security expertise has likely never been greater.

Students should expect that minor courses will only be available on the Durham campus.

Requirements

The corporate security minor requires students to complete five courses (20 credits).

All five courses applied to the corporate security minor must be completed with a minimum grade of C- and an overall GPA of 2.0.

Academic policies related to Minors.

Students must take at least three 500-level or above courses to complete the minor, noting no more than two courses (8 credits) may also be used in the HLS major.

Code	Title	Credits
Required Courses		
HLS 415	Fundamentals of Corporate Security	4
HLS 630	Sports and Large Event Security Management	4
ADMN 400	Introduction to Business	4
or BUS 400	Introduction to Business	
Electives		
Select two courses from the following:		8
BUS 405	Introduction to Business Computer Applications	
ENGL 502	Professional and Technical Writing	
HLS 520	Homeland Security Law and Policy	
HLS 540	Prevention and Detection of Fraud	
HLS 615	Introduction to Fraud Investigation	
HLS 640	Forensic Accounting	
MGT 535	Organizational Behavior	
PHIL 431	Business Ethics	
Total Credits		**20**

Cybersecurity Policy Minor

https://manchester.unh.edu/program/minor/cybersecurity-policy

Description

The Minor in Cybersecurity Policy introduces students to the basics of cybersecurity, as well as to societal and business mandates for incorporating cybersecurity into an organization's policies and governance structures. We study techniques for communicating about cybersecurity, and we explore solutions for sustaining cybersecurity within a variety of organizations.

This minor is available to CPS Online, Durham, and Manchester students. Students must be accepted into a participating accelerated master's program to complete this minor.

Depending on the courses chosen, this minor may be completed 100% online or in a hybrid format (online/in-person courses). Some courses may be taken at any time, but other courses may be taken only *after a student is accepted into one of the following participating accelerated master's programs*:

- Master of Science in Cybersecurity Policy and Risk Management (MS CPRM)
- Master in Public Policy (MPP)
- Master of Public Administration (MPA)

Requirements

Academic policies related to Minors.

- Some courses may be taken at any time, but other courses may be taken only after a student is accepted into one of the participating accelerated master's programs.
- The minor requires at least five courses. All courses for the minor must be completed with a minimum grade of C- and an overall GPA of 2.0.
- Note that higher minimum grades and GPA may be required for these courses to count toward an undergraduate major or master's degree.
- No more than two courses used to satisfy undergraduate major requirements may be used for the minor.
- If a student is enrolled in both sections of a dual-listed course, only one course section will be counted toward the minor requirements.

Pursuant to Graduate School policy for accelerated master's*, students must complete 90 credits before enrolling in 800-level courses. Students apply to the accelerated master's program in their junior year and once admitted complete 800-level courses in their senior year.*

Code	Title	Credits
Required Core Courses		
HLS 455	Introduction to Cybersecurity	4
or CS 527	Fundamentals of Cybersecurity	
or CMPL 525	Foundations of Cybersecurity	
CPRM 810	Foundations of Cybersecurity Policy	3
Electives		
Select at least three courses from the following: [1]		9-12
CMN 456	Propaganda and Persuasion	
CPRM 820	Policy Development and Communication	
CPRM 830	Security Measures I	
CPRM 840	Cybersecurity Standards, Regulations, and Laws	
CPRM 850	Security Measures II	
CPRM 890	Organizations, Change Management, and Leadership	
or PA 709	Organization and Management in Public and Nonprofit Sectors	
or PA 809	Organization and Management in Public and Non-profit Sectors	
or PA 812	Leadership Theory and Practice	
or PA 718	Nonprofit Management	
or PA 818	Non-Profit Management	
HLS 515	Critical Infrastructure Security and Resilience	
or PA 700	Foundations and Theories of Public Administration	
or PA 800	Foundations and Theories of Public Administration	
IT 666	Cybersecurity Practices	
PPOL 706	Fundamentals of Policy Analysis	
or PPOL 806	Fundamentals of Policy Analysis	
PPOL 810	Policy Across Borders	
PPOL 722	Media Strategy and Communication	
or PPOL 822	Media Strategy and Skills	
Total Credits		**16-19**

[1] An unlisted elective may only be included with prior approval from the minor coordinator.

Emergency Management Minor

https://manchester.unh.edu/program/minor/emergency-management

Description

The Federal Emergency Management Agency (FEMA) defines Emergency Management (EM) as "the managerial function charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters." Students completing this minor will have a composite view of emergency management, and its integral role in Homeland Security and resilience, as well as how to design emergency management plans, continuity of operations plans and how to design and evaluate exercises in both the public and private sectors. As such, the minor in EM formalizes an academic credential in an area vital to Homeland Security and of interest to several other disciplines and professions such as business, law enforcement, urban and community planning, environmental studies, and government and military affairs.

Students should expect that minor courses will only be available on the Durham campus.

Requirements

Academic policies related to Minors.

The Minor in Emergency Management will require five courses (20 credits). Two courses are also required by the Homeland Security major (Department of Security Studies) which provides the foundation for the minor and two from the Geography Department. One additional course from a list of electives is required to complete the minor. Students may take an unlisted course as an elective but only with prior approval by the minor coordinator.

Code	Title	Credits
Required Courses		
HLS 510	Fundamentals of Emergency Management	4
HLS 515	Critical Infrastructure Security and Resilience	4
GEOG 560	Natural Hazards and Human Disasters	4
GEOG 591	Making Maps: GIS Fundamentals	4
Select one course from the following:		4
HLS 630	Sports and Large Event Security Management	
HLS 665	Bioterrorism, Biosecurity, and Biodefense	
DATA 557	Introduction to Data Science and Analytics	
BUS 620	Organizational Behavior	
ADMN 575	Behavior in Organizations	
Other elective only as approved by the coordinator		
Total Credits		**20**

Homeland Security Major (B.S.)

https://manchester.unh.edu/program/bs/homeland-security-major

Description

Though some administrative aspects of the Homeland Security major are managed in Manchester, NH, the program is delivered and academically supported in Durham, NH.

Beginning in the 2025-2026 academic year, program admission has been paused for the Manchester campus.

The UNH Homeland Security program is built upon the expertise and advice of subject matter experts from around the nation. Its proven curriculum includes practical experiences, service and experiential learning opportunities, and applied projects and mentored research that together empower students to manage programs and to lead people. HLS provides students with an impressive array of tools including how to do strategic planning, how to build emergency management and continuity plans, how to perform an organization-wide security and risk assessments, and how to design and evaluate exercises. The 4-year curriculum is flexible and incorporates the ability for students to complete coursework of "breadth" as either two minors, a double major, or a minor and study abroad experience. Students transferring with an associate's degree automatically satisfy the breadth requirement. Ultimately, the Homeland Security program empowers students to be successful on the job market or in graduate school in a broad array of security-related fields.

Homeland security is a broad-field, applied liberal arts degree teaching students critical thinking, writing and analysis skills. As a result, HLS creates several graduate school opportunities and opens students to dozens of career paths in both the public sector (i.e., local, state or federal government), and the private sector or the military. Students will find diverse and rewarding career opportunities in cyber security/ information assurance, intelligence analysis, civil or Foreign Service, diplomatic security, law enforcement at the local, state or federal levels, emergency and disaster management, immigration, border and transportation security, policy making, corporate security, risk management, critical infrastructure protection, human security and more.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

All courses within the major must be completed with a grade of C- or above and an overall GPA of 2.0 or above in major courses.

Code	Title	Credits
Core Major Requirements		
HLS 410	Introduction to Homeland Security	4
HLS 415	Fundamentals of Corporate Security	4
HLS 455	Introduction to Cybersecurity	4
HLS 480	Professional Skills in Homeland Security	4
HLS 505	Political Violence and Terrorism	4
HLS 510	Fundamentals of Emergency Management	4
HLS 515	Critical Infrastructure Security and Resilience	4
HLS 520	Homeland Security Law and Policy	4
HLS 580	Environmental and Human Security	4
HLS 605	Disaster Research Methods	4
or JUST 501	Research Methods	
or PSYC 502	Research Methods in Psychology	
HLS 650	Topics in National Security Intelligence	4
HLS 760	Strategic Planning and Decision Making	4
HLS 770	Internship in Homeland Security	4
or HLS 799	Senior Thesis in Homeland Security	

HLS 790	Capstone in Homeland Security	4
Total Credits		**56**

Breadth Requirement
In addition to the core HLS courses, students must complete 40 additional credits from either Durham or Manchester campuses, or both, in one of five ways:

1. two minors;
2. a minor and a "coherent block"/self-designed concentration (i.e., ROTC credits, or credits earned from another major). The coherent block needs to be approved by the HLS coordinator;
3. a second major or a UNH dual degree;
4. an associate's degree transferred in to UNH;
5. some other combination of coursework with consent of the HLS program coordinator.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
HLS 410	Introduction to Homeland Security	4
Discovery Course		4
Breadth Area Course		4
	Credits	**16**
Spring		
PSYC 402	Statistics in Psychology	4
HLS 415	Fundamentals of Corporate Security	4
HLS 455	Introduction to Cybersecurity	4
Discovery Course		4
	Credits	**16**
Second Year		
Fall		
HLS 480	Professional Skills in Homeland Security	4
HLS 505	Political Violence and Terrorism	4
HLS 605 or JUST 501 or PSYC 502	Disaster Research Methods or Research Methods or Research Methods in Psychology	4
Breadth Area Course		4
	Credits	**16**
Spring		
HLS 510	Fundamentals of Emergency Management	4
HLS 515	Critical Infrastructure Security and Resilience	4
Breadth Area Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
HLS 520	Homeland Security Law and Policy	4
HLS 650	Topics in National Security Intelligence	4
Discovery Course		4
Breadth Area Course		4
	Credits	**16**
Spring		
HLS 580	Environmental and Human Security	4
HLS 770	Internship in Homeland Security	4
Discovery Course		4
Breadth Area Course		4
	Credits	**16**
Fourth Year		
Fall		
HLS 760	Strategic Planning and Decision Making	4
Breadth Area Course		4
Discovery Course		4
Breadth Area Course		4
	Credits	**16**
Spring		
HLS 790	Capstone in Homeland Security	4
Breadth Area Course		4
Breadth Area Course		4
Breadth Area Course		4
	Credits	**16**
	Total Credits	**128**

Student Learning Outcomes

Program Learning Outcomes

- Conduct research and work collaboratively to deliver professional, written papers, presentations, and briefs.
- Demonstrate knowledge of contemporary or emergent threats, challenges or issues including natural manmade and technological hazards.
- Apply knowledge and tools gained throughout the HLS program to complete a capstone project.
- Complete an internship in HLS (or a senior thesis in HLS).
- Recognize the concepts of ethics and professionalism in the homeland security enterprise.

Homeland Security Minor

https://manchester.unh.edu/program/minor/homeland-security

Description

Today's threat environment is complex and dynamic and includes threats from small- to large-scale attacks of violence or terrorism, to cybersecurity to catastrophic natural disasters such as hurricanes, wildfires, tornadoes and earthquakes. The Homeland Security (HLS) minor will give students an excellent glimpse at what it takes to keep the nation safe and resilient.

The minor in Homeland Security (HLS) is designed to provide a professional experience to students ***not*** majoring in Homeland Security, but who are interested in aspects of the homeland security profession. Students will see how Homeland Security issues, challenges, and tools are related to their specific major and how Homeland Security can be used to embellish their careers. Courses for the HLS minor are offered on the Durham campus only. Students at other locations should contact their advisor to explore alternative options.

Students should expect that minor courses will only be available on the Durham campus.

Requirements

- The minor in homeland security requires five courses (20 credits).
- Students must earn a minimum grade of C- in each course and an overall GPA of 2.0 in minor courses.
- Transfer students may transfer up to two courses, subject to the approval of the HLS program coordinator.
- Courses taken on a pass/fail basis may not be used for the minor.
- Homeland Security majors cannot use the HLS minor as a breadth area.

Academic policies related to Minors.

Code	Title	Credits
Required courses		
HLS 410	Introduction to Homeland Security	4
HLS 455	Introduction to Cybersecurity	4
or HLS 415	Fundamentals of Corporate Security	
Select three of the following:		12
HLS 505	Political Violence and Terrorism	
HLS 510	Fundamentals of Emergency Management	
HLS 515	Critical Infrastructure Security and Resilience	
HLS 520	Homeland Security Law and Policy	
HLS 555	Comparative Homeland Security Systems	
HLS 580	Environmental and Human Security	
HLS 650	Topics in National Security Intelligence	
HLS 760	Strategic Planning and Decision Making	
Total Credits		**20**

National Security Intelligence Minor

https://manchester.unh.edu/program/minor/national-security-intelligence

Description

The objective of this academic minor is to allow students to study intelligence issues and challenges related to US national security.

National security intelligence is a secret state activity to understand, influence, or defend against a threat to gain an advantage. Students may take courses in multiple disciplines across UNH while pursuing the national security intelligence minor. Students completing this minor will have a composite view of national security intelligence and related topics that may support career path in the government, private sector, and not for profit realms.

Requirements

Academic policies related to Minors.

The Minor in National Security Intelligence requires five courses. Student completing the minor must take three courses originating in the Department of Security Studies which provide the foundation for the minor. Students will build upon this foundation with two additional intermediate course electives from the Department of Security Studies or other departments across UNH.

Code	Title	Credits
Required courses		
HLS 550	History and Structure of the U.S. Intelligence Community	4
HLS 650	Topics in National Security Intelligence	4
Select one of the following required courses:		4
HLS 651	Issues in Intelligence Collection	
HLS 652	Intelligence Analysis and Production	
HLS 653	Counterintelligence	
HLS 654	Covert Action	
Electives		
Select two of the following electives:		6
HLS 505	Political Violence and Terrorism	
HLS 651	Issues in Intelligence Collection	
HLS 652	Intelligence Analysis and Production	
HLS 653	Counterintelligence	
HLS 654	Covert Action	
HLS 655	Open Source Intelligence	
HIST 537	Espionage and History	
HIST 620	Foreign Relations of the United States	
LLC 535A	Professional Culture in Europe	
NSIA 810	National Security Policy and the Intelligence Community [1]	
NSIA 820	Intelligence Analysis [1]	
POLT 403	United States in World Affairs	
POLT 548	Drug Wars	
POLT 550	Comparative Government and Society	
POLT 562	Strategy and National Security Policy	
CMN 456	Propaganda and Persuasion	
Total Credits		**18**

[1] Accelerated Master's students only may enroll in NSIA 810 and NSIA 820.

Terrorism Studies Minor

https://manchester.unh.edu/program/minor/terrorism-studies

Description

Terrorism is often a top priority of US national and homeland security agencies such as the Department of Defense, Intelligence Community, FBI, CIA, Department of Homeland Security, and State Department. The terrorism studies minor explores the causes, dynamics, and prevention of violent extremism at home and abroad. Courses explore different types of violent extremism and the range of counterterrorism strategies used in the US and other countries from interdisciplinary perspectives.

Students should expect that minor courses will only be available on the Durham campus.

Requirements

Academic policies related to Minors.

The terrorism studies minor requires students to complete five courses (18-20 credits).

- All courses for the minor must be completed with a minimum grade of C- and an overall GPA of 2.0.
- Students must take at least three 500-level or above courses to complete the minor.
- Transfer students may transfer up to two courses, with approval of the Homeland Security program coordinator.

Code	Title	Credits
Required courses		
HLS 505	Political Violence and Terrorism	4
HLS 555	Comparative Homeland Security Systems	4
HLS 650	Topics in National Security Intelligence	4
Elective Courses		
Select two courses from the following:		6-8
GCHS 710	Conflict & Human Security	
GCHS 730	International Development & Human Security	
HLS 665	Bioterrorism, Biosecurity, and Biodefense	
HLS 750	Emergent Topics in Homeland Security/Homeland Defense	
POLT 403	United States in World Affairs	
Total Credits		**18-20**

Humanities

- Humanities Major (B.A.) Manchester (p. 686)

Humanities Major (B.A.) Manchester

Description

Beginning in the 2025-26 academic year, the Humanities major will no longer be accepting new students. Current Humanities students will continue to have access to the same high-quality education and resources until they graduate.

The UNH Manchester Humanities program focuses on the world's great cultures and how humans interact with the world. Students take an interdisciplinary approach in studying works from an array of regions and time periods, exploring how cultural productions emerge from a rich social environment. Drawing from history, literature, art, philosophy, politics, and the sciences, the Humanities program not only provides foundational skills in the true liberal arts tradition but also gives students the flexibility to design a program of study keyed to their own interests.

The program attracts highly motivated students who wish to assume significant responsibility for the content and direction of their studies. Individually designed programs may cover the full range of student interests: for example, the social and ethical implications of genetic engineering or the examination of a historical period through study of its literature, arts, history, philosophy, and sciences. Humanities students develop skills of analysis, critical assessment, and effective communication, completing their major with two capstone seminars. The first seminar, explores the nature of creativity through the lives and works of individuals such as Leonardo da Vinci, Kathe Kollwitz, Mozart, Freud, Einstein, and Georgia O'Keeffe. The second seminar, explores current social and political issues with a focus on developments in public policy, science, and business, and their impact on social values.

A Humanities major or minor can complement work in other majors such as English Teaching, Business, Communication Arts, Psychology, or Computing Information Systems. Humanities majors find employment in a wide range of fields or pursue graduate study in subjects such as law or education. The skills and knowledge developed through the major are important in virtually all social and career responsibilities.

For more information, contact the UNH Manchester Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

For the Humanities major at UNH Manchester, students must complete a minimum of 128 credits and satisfy the University's Discovery Program and foreign language requirements, and students must complete 40 credits with a minimum grade of C in each course in the major.

Code	Title	Credits
Core Courses		
HIST 500	Introduction to Historical Thinking	4
or ENGL 419	How to Read Anything	
HUMA 411	Humanities I	4
HUMA 412	Humanities II	4
Self-Designed Concentration [1]		**20**
Capstone Seminar Courses		
HUMA 795	Study of Creativity	4
HUMA 796	Study of Contemporary Issues	4
Total Credits		**40**

[1] This is an approved program of study designed by the student in consultation with a faculty advisor. In addition to courses available on the Manchester campus, students may, with prior approval, use courses from area colleges and the University's Durham campus. The concentration is made up of five courses from any relevant discipline (ENGL, CLAS, PHIL, HIST, etc.) with at least two at the 600 or 700 level.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
Elective		4
Elective		4
Discovery Course		4
	Credits	**17-18**
Spring		
Quantative Reasoning		4
HUMA 411	Humanities I	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
HUMA 412	Humanities II	4
ENGL 419	How to Read Anything	4
Discovery Course		4
	Credits	**16**
Spring		
Foreign Language		4
Major Concentration		4
Elective		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Major Concentration		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Major Concentration		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
Major Concentration		4
HUMA 795	Study of Creativity	4
Discovery Course		4
Elective		4
	Credits	**16**
Spring		
Major Concentration		4
HUMA 796	Study of Contemporary Issues	4
Discovery course		4
Elective		4
	Credits	**16**
	Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

Students will be able to:

- Think critically, and across disciplines, in analyzing and comparing works produced within given cultures or historical periods.
- Conduct and present multidisciplinary research in written, oral, or other forms.
- Identify and evaluate primary and secondary sources appropriate for research within the humanities.

Neuropsychology

Explore the human brain to fuel research, innovation, and discovery

Channel your curiosity about the human brain and behavior in our cutting-edge Neuropsychology program. Fusing core components of biology and psychology, this program prepares students for an impactful career in the growing field of neuroscience.

You'll explore the concepts behind normal human behavior, from learning and memory to sensation and perception. You'll also examine complex neurological conditions like dementia, addiction and mood and movement disorders.

Guided by faculty experts in our innovative research labs, you'll gain the empirical, analytic and communication skills that will make you stand out in your career — or in your application to graduate or medical school.

Programs

- Neuropsychology Major (B.S.) (p. 687)

Faculty

Neuropsychology Faculty

Neuropsychology Major (B.S.)

https://manchester.unh.edu/program/bs/neuropsychology-major

Description

Neuropsychology is the study of the human brain and its relation to behavior. The UNH Manchester program focuses on the biological basis of human functioning in both normal and pathological states (e.g., dementia, depression) and therefore, prepares students for careers working with individuals with various mental health and neurological conditions. This interdisciplinary program offers a concentration of core and advanced courses in psychology and biology while providing sufficient flexibility for students to customize their education in order to

meet specific requirements for their chosen career path, including the health professions.

The neuropsychology program prepares students for a variety of careers within the field of neuroscience, including bachelor-level positions and graduate training in research and health professions. At the bachelor-level, students are prepared for positions in healthcare (e.g., clinical laboratory technologist, psychometrician) and biomedical research (research assistant). The program is also designed to provide the flexibility needed to prepare students for graduate training in the health professions, such as being a physician, physician assistant, psychologist, neuropsychologist, or occupational therapist. Students interested in medical school are able to complete premedical requirements within four years.

For more information contact, the UNH Manchester Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students majoring in neuropsychology must complete a minimum of 128 credits and satisfy the University's Discovery Program, and complete 56 credits in the major with a minimum of C- in each course and a 2.0 overall grade-point average in all major requirements. Three courses in the major can be used to fulfill both a major requirement and a Discovery requirement, providing students with more flexibility to customize their education.

Transfer students who elect to major in neuropsychology must complete at least 32 credits in the program at UNH to qualify for the degree in neuropsychology. The department's academic advisors will determine the distribution of these credits. Transfer students should note that courses are allotted only the number of credits granted by the original institution (after adjustments for semester-hour equivalents). Thus, students transferring from an institution at which courses carry less than four credits each must make up for any credit deficit created by acceptance of transfer credits into the neuropsychology major.

Specific course selections should be discussed with the advisor. Exceptions to the requirements for the major require a petition to the department.

Code	Title	Credits
Core Courses in Psychology and Biology		
BIOL 413 & BIOL 414	Principles of Biology I and Principles of Biology II (both with lab)	8
CHEM 403	General Chemistry I (with lab)	4
GEN 604	Principles of Genetics	4
NPSY 600	Behavioral Neuroscience	4
PSYC 401	Introduction to Psychology [1]	4
PSYC 402	Statistics in Psychology	4
PSYC 502	Research Methods in Psychology	4
PSYC 705	Tests and Measurement	4
Advanced Courses in Psychology and Biology		
Select three courses from the following:		12
PSYC 710	Visual Perception	
PSYC 713	Psychology of Consciousness	
PSYC 731	Brain and Behavior	
PSYC 733	Drugs and Behavior	
PSYC 735	Neurobiology of Mood Disorders	
PSYC 736	Attention Disorders	
Advanced Elective in Psychology		
Select one course from the following:		4
PSYC 758	Health Psychology	
PSYC 762	Counseling	
PSYC 764W	Clinical Child Psychology	
PSYC 791W	Special Topics	
Capstone Requirement		
Select one of the following:		4
PSYC 793	Internship (at approved site)	
NPSY 795	Independent Study (4 credits)	
NPSY 798	Capstone [2]	
Total Credits		**56**

1 If used to fulfill SS Discovery requirement, students must take PSYC 511 Sensation and Perception, PSYC 513 Cognitive Psychology, or PSYC 561 Psychopathology.

2 Concurrent registration with a 4-credit 700-level Psychology or Neuropsychology course

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
PSYC 401	Introduction to Psychology	4
BIOL 413	Principles of Biology I	4
Discovery Course		4
	Credits	**17-18**
Spring		
PSYC 402	Statistics in Psychology	4
BIOL 414	Principles of Biology II	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
CHEM 403	General Chemistry I	4
NPSY 600	Behavioral Neuroscience	4
PSYC 502	Research Methods in Psychology	4

Discovery Course		4
	Credits	**16**
Spring		
GEN 604	Principles of Genetics	4
PSYC 705	Tests and Measurement	4
Elective		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Advanced Courses in Psychology and Biology		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
Advanced Courses in Psychology and Biology		4
Discovery Course		4
Elective Course		4
Elective Course		4
	Credits	**16**
Fourth Year		
Fall		
Advanced Courses in Psychology and Biology		4
Advanced Elective in Psychology		4
Elective		4
Elective		4
	Credits	**16**
Spring		
PSYC 793 or PSYC 795 or NPSY 798	Internship [1] or Independent Study or Capstone	4
Elective		4
Elective		4
Elective		4
	Credits	**16**
	Total Credits	**129-130**

[1] NPSY 798 Capstone option must have concurrent enrollment

Student Learning Outcomes

Program Learning Outcomes

A student successfully completing this program will obtain the following competencies:

- Understand fundamental principles of research in the sciences (i.e. psychology and biology) such as the scientific method and statistical analysis.
- Understand ethical issues in research and clinical applications of neuropsychology.
- Understand the biological basis for normal human behavior (e.g. sensation, perception, learning and memory, etc.) and for common neurological disorders (e.g. dementia, addictions, etc.).
- Demonstrate the ability to gather, analyze, evaluate, and integrate peer-reviewed scientific articles.
- Effectively communicate complex neurobiological topics both orally and in writing consistent with the discipline (i.e. American Psychological Association).

Philosophy

Programs

- Philosophy Minor (Manchester) (p. 689)

Philosophy Minor (Manchester)

https://manchester.unh.edu/program/minor/philosophy

Description

Philosophy is the study of the fundamental nature of truth, existence, beauty, morality, and justice. People study philosophy to understand the basic principles of science, art, and the human condition.

Though this sounds abstract, a background in philosophy is excellent training for any walk of life. Philosophy offers training for a variety of careers by providing a unique combination of life-long skills: analytic and interpretive skills, critical reasoning skills, the enhanced capacity to detect problems and to solve them, excellence in oral and written presentation and defense of one's ideas, skill at asking probing and central questions about the ideas of others (as well as about one's own ideas), and skill at effectively understanding, organizing, and evaluating complex systems of thought.

Requirements

A philosophy minor consists of five (5) philosophy courses (for a total of 20 credits) with a grade of C- or above.

Code	Title	Credits
PHIL course at 500-level or higher		4
Four elective PHIL courses		16
Total Credits		**20**

PHIL 495 Tutorial Reading and PHIL 795 Independent Study may be used towards the minor only with special approval.

Psychology

Explore the biopsychosocial factors that drive thoughts and behaviors

Explore the science of behavior and mental processes in our Psychology program, bringing classroom learning to life in our research labs and in the field. Guided by faculty who are experts in their disciplines, you'll develop a broad background in the field — including perceptual, biological, clinical/counseling, and developmental psychology.

Our program prepares you for careers aimed at improving lives ranging from research assistant to mental health worker, social welfare caseworker to teaching. You'll also foster skills that are attractive and useful in all industries, including critical and logical thinking, data analysis, research, scientific communication and more.

Programs

- Psychology Major (B.A.) Manchester (p. 690)
- Psychology Minor (Manchester) (p. 692)

Faculty

Psychology Faculty

Psychology Major (B.A.) Manchester

https://manchester.unh.edu/program/ba/psychology-major

Description

Psychology is the scientific study of behavior and mental processes. The UNH Manchester psychology program provides students with a broad background in psychology, introducing them to both the experimental and clinical perspectives in the field.

The psychology program, through its independent study and internship programs, offers opportunities for participation in cooperating New Hampshire mental health, human services, and rehabilitation facilities. Students have worked in hospitals, halfway houses, mental health centers, and other agencies. The department also invites guest speakers to discuss important issues in the field and sponsors a Psychology/ Neuropsychology Club.

Psychology graduates find employment as trained research assistants, mental health aides in a wide variety of human services agencies, social welfare caseworkers, teachers in special education programs, and professionals in government, business, and industry. It is normally expected that students who wish to do professional clinical work will need to pursue graduate training at the master's or doctoral level.

For more information contact, the UNH Manchester Office of Admissions (unhm.admissions@unh.edu) at (603) 641-4150.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students majoring in psychology must complete a minimum of 128 credits, satisfy the University's Discovery Program and foreign language requirements, and complete 44 credits with a minimum of C- in each course and a 2.0 overall grade-point average in all major requirements.

Transfer students who elect to major in psychology must complete at least 24 credits in the program at UNH/UNH Manchester to qualify for the degree in psychology. Transfer students must earn a total of 44 approved credits for completion of the psychology major. The department's academic advisors will determine the distribution of these credits. Transfer students should note that courses are allotted only the number of credits granted by the original institution (after adjustments for semester-hour equivalents). Thus, students transferring from an institution at which courses carry less than four credits each must make up for any credit deficit created by acceptance of transfer credits into the psychology major. Only courses taken in a psychology department can be transferred into the psychology major. Of the four 700-level courses required for the major, at least three must be taken at UNH.

The courses listed below are offered on the UNH Manchester and/or Durham campuses; specific course selections should be discussed with the advisor. Exceptions to the requirements for the major require a petition to the department.

Code	Title	Credits
Core Courses		
PSYC 401	Introduction to Psychology	4
PSYC 402	Statistics in Psychology	4
PSYC 502	Research Methods in Psychology	4
Breadth (500-level) courses		
Select two of the following courses from Group I:		8
PSYC 511	Sensation and Perception	
PSYC 512	Psychology of Primates	
PSYC 513	Cognitive Psychology	
PSYC 521	Behavior Analysis	
PSYC 522	Behaviorism	
PSYC 531	Psychobiology	
Select two of the following courses from Group II:		8
PSYC 552	Social Psychology	
PSYC 553	Personality	
PSYC 561	Psychopathology	
PSYC 571	Pioneers of Psychology	
PSYC 581	Child Development	
Depth (700-level) courses		
Select two of the following courses from Group I:		8
PSYC 705	Tests and Measurement [1]	
PSYC 710	Visual Perception	
PSYC 713	Psychology of Consciousness	
PSYC 720	Animal Cognition	
PSYC 722	Behaviorism, Culture, and Contemporary Society	
PSYC 731	Brain and Behavior	
PSYC 733	Drugs and Behavior	
PSYC 735	Neurobiology of Mood Disorders	
PSYC 736	Attention Disorders	
PSYC 741W	Special Topics	
Select two of the following courses from Group II:		8
PSYC 705	Tests and Measurement [1]	
PSYC 755	Psychology and Law	
PSYC 756	Psychology of Crime and Justice	
PSYC 757	Psychology of Happiness	
PSYC 758	Health Psychology	
PSYC 762	Counseling	
PSYC 785	Social Development	
PSYC 764W	Clinical Child Psychology	

PSYC 791W	Special Topics	
PSYC 793	Internship	
Discovery Capstone		
See below options		
Total Credits		**44**

[1] May be substituted for a Group I or Group II course, but they may not both be used to fill the same group.

Discovery program requirements

- Major department courses may not be used to satisfy Discovery category requirements except for PSYC 402 Statistics in Psychology, which may be used to satisfy the Quantitative Reasoning (QR) Discovery requirement and the major requirement.
- PSYC 401 cannot be used to fulfill a Social Science.
- PSYC 571 cannot be used to fulfill a Historical Perspective.
- In the case that Psychology is a second major, major courses can be counted toward the Discovery requirements.

Discovery Capstone

The Discovery Program capstone requirement, taken during the senior year, may be fulfilled by completing one of the following options:

1. PSYC 793 Internship: This will count towards fulfilling the capstone and a group II 700-level psychology course. By taking PSYC 793 Internship, the capstone will be considered fulfilled.
2. PSYC 795 Independent Study: Students can designate a 4 credit independent study as their capstone experience. Students should also register for PSYC 798 Capstone, a 0 credit course to reflect that the capstone experience is fulfilled.
3. One 700-level course designated as capstone. A capstone designated 700-level course will count towards fulfilling the capstone and a 700-level course. Students will register for PSYC 798 Capstone, a 0 credit course to reflect the capstone experience is fulfilled. **See guidelines below**:

- You may take any eligible 700-level Psychology course in your **senior year** (90+ completed credits) for Capstone credit.
- Ask your professor about the possibility of taking the course for Capstone credit. Remember that your professor is not obligated to designate a course for Capstone credit. Please be respectful in approaching your professor, and if the answer is no, please accept this decision.
- Meet and discuss with your professor what you will be doing to constitute your Capstone experience. In some cases, it will be an extra assignment; in others it will involve the expansion of existing class work. Your professor will use his/her professional discretion to determine what constitutes as your Capstone experience.
- If approved, you will register for PSYC 798 Capstone in addition to the 700-level course.

The psychology department does not accept other departments' statistic courses toward the psychology major. Students who have taken a statistics course other than PSYC 402 Statistics in Psychology must pass a competency exam in order to declare the major and/or register for PSYC 402 Statistics in Psychology.

Students who plan to transfer to Durham should consult with their advisor.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
PSYC 401	Introduction to Psychology	4
Discovery Course		4
Discovery Course		4
	Credits	**17-18**
Spring		
PSYC 402	Statistics in Psychology	4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Second Year		
Fall		
Foreign Language		4
PSYC 502	Research Methods in Psychology	4
Breadth (500-level) course		4
Discovery Course		4
	Credits	**16**
Spring		
Foreign Language		4
Breadth (500-level) course		4
Breadth (500-level) course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Breadth (500-level) course		4
Depth (700-level) course		4
Discovery Course		4
Elective		4
	Credits	**16**
Spring		
Depth (700-level) course		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
Depth (700-level) course		4
Discovery Course		4

Elective	4
Elective	4
Credits	**16**
Spring	
Depth (700-level) course	4
Capstone course	4
Discovery Course	4
Elective	4
Credits	**16**
Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate fundamental knowledge and comprehension of the major concepts, theoretical perspectives, historical trends, and empirical findings in psychology.
- Understand basic research methods in psychology including design, data analysis, and interpretation; and utilize this knowledge to conduct their own psychological research, with an appreciation of the ethical issues involved in human and non-human research.
- Engage in scientific reasoning and problem solving so that they can evaluate the quality and implications of scientific research.
- Write empirical research reports and literature reviews in American Psychological Association style and present findings from scientific research.

Psychology Minor (Manchester)

https://manchester.unh.edu/program/minor/psychology

Description

The Psychology minor brings a unique perspective on society and human behavior to your studies and adds a set of skills that makes you stand out to employers in a variety of industries.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
PSYC 401	Introduction to Psychology	4
Select two PSYC courses at the 500-level or higher		8
Select two additional PSYC courses		8
Total Credits		**20**

Additional Information

- No more than 4 credits of PSYC 795 Independent Study may be applied to the minor.
- A maximum of 9 approved psychology transfer credits can be applied to the UNH psychology minor.
- Transfer courses must be evaluated for their equivalency. Only courses taken in a psychology department can be applied towards the minor.
- Three-credit transfer courses can be applied as only three credits. Students must make up the credit deficit created by acceptance of transfer courses, with one exception: one three-credit course accepted in transfer may be applied for a total of 19 credits.
- AP Psychology transferred into UNH is equivalent as PSYC 401 Introduction to Psychology.

Public Service and Nonprofit Leadership

Programs

- Public Service and Nonprofit Leadership Major (B.S.) (p. 692)

Public Service and Nonprofit Leadership Major (B.S.)

Description

Beginning in the 2023-2024 academic year, the Public Service and Nonprofit Leadership major will no longer be accepting new students. Current Public Service and Nonprofit Leadership students will continue to have access to the same high-quality education and resources until they graduate.

The bachelor of science degree in public service and nonprofit leadership provides an interdisciplinary, applied approach to the study of public and not-for-profit institutions and actors. Students explore the ways that leaders and citizens work in and around governments to address the complex problems confronted by New Hampshire and the United States today.

All students choose a path that enables them to complete an accelerated Masters in Public Policy or Masters in Public Administration, where they take their most advanced courses in the Major alongside graduate students in the UNH Carsey School of Public Policy. Those courses count as 12 credits toward their BS degree and as 9 credits toward a UNH-Carsey MPP or MPA, should a student choose to continue on to a Masters. Most students entering as first-year students will be able to complete a combined BS/MPA or BS/MPP within five years.

Public Service majors develop essential, transferable skills in critical thinking, practical problem solving, communication, teamwork, leadership, civic and community engagement, research, and data analysis. Coursework emphasizes experiential learning, such as interning at the N.H. State House or with local lobbying firms, engaged research in the real world, and hands-on service learning at a range of not-for-profit organizations in health, human services, advocacy, and the arts. All students must undertake at least one semester-long internship and at least one independent research project to be presented at the UNH Undergraduate Research Conference.

Public service and nonprofit leadership graduates can pursue careers in state and local government, political campaigns, advocacy, non-profit organizations, journalism, education, and more, and are prepared to pursue graduate studies in law, public policy, public administration, community development, and public health.

For more information, contact the UNH Manchester Admissions office (unhm.admissions@unh.edu). For current students, contact the UNH Manchester Academic Advising office (unhm.advising@unh.edu).

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Students must complete 128 credits to graduate, including 44 credits in the public service and nonprofit leadership major. Students must maintain an overall cumulative GPA of 2.0 and a cumulative GPA in the major of 2.0. No credit toward the major will be given for any course in which the student receives a grade of less than C-. Students also must fulfill the UNH Discovery Program requirements. Up to three courses may be used toward both the public service and nonprofit leadership major and UNH Discovery Program requirements. Transfer students must take at least 28 credits in the major at UNH Manchester.

Code	Title	Credits
Required Courses		
PS 402	Practical Politics	4
PS 500	Wicked Problems: Puzzles in Public Policy	4
PS 506	Civil Society and Public Policy	4
PS 515	New Hampshire Politics in Action	4
PS 595	Research for Political and Policy Action	4
PS 701	Senior Seminar/Internship in Public Service	4
or INCO 505I	Internship: Semester in the City (Boston) or Semester for Impact (NH)	
Select eight credits from the following courses:		8
PS 599		
PS 731	Community Leadership - Capstone	
ECN 411	Introduction to Macroeconomic Principles	
ECN 412	Introduction to Microeconomic Principles	
ECN 650	Economics for Managers	
HMP 401	United States Health Care Systems	
HMP 403	Introduction to Public Health	
INCO 505A & INCO 505B	Becoming a Problem Solver and Social Innovator's Toolbox	
UMST 599	Special Topics	
Select one path from the following:		12
MPA Path:		
PA 700	Foundations and Theories of Public Administration	
PA 709	Organization and Management in Public and Nonprofit Sectors	
PA 718	Nonprofit Management	
MPP Path:		
PPOL 706	Fundamentals of Policy Analysis	
PPOL 712	Strategies for Policy Impact	
PPOL 722	Media Strategy and Communication	
Total Credits		**44**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
UMST 401 or UMST 402	First Year Seminar or Transfer Seminar	1-2
ENGL 401	First-Year Writing	4
PS 402	Practical Politics	4
Discovery Course		4
Discovery Course		4
	Credits	**17-18**
Spring		
Quantitative Reasoning		4
PS 500	Wicked Problems: Puzzles in Public Policy	4
Discovery Course		4
Elective		4
	Credits	**16**
Second Year		
Fall		
PS 506	Civil Society and Public Policy	4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
PS 515	New Hampshire Politics in Action	4
Major elective		4
Elective		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
Major elective		4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Spring		
PS 595	Research for Political and Policy Action	4
Discovery Course		4
Elective		4
Elective		4
	Credits	**16**
Fourth Year		
Fall		
MPP or MPA course		4
MPP or MPA course		4

Discovery Course		4
Elective		4
	Credits	**16**
Spring		
PS 701	Senior Seminar/Internship in Public Service	4
MPP or MPA course		4
Discovery Course		4
Elective		4
	Credits	**16**
	Total Credits	**129-130**

Student Learning Outcomes

Program Learning Outcomes

By the end of their degree program, Public Service & Nonprofit Leadership majors should be able to demonstrate the following knowledge, skills, and core values so that they are positioned to be leaders in public and nonprofit organizations and effective analysts of and advocates for effective public policies.

Knowledge

- Describe key theories of policymaking, and explain which of them they think is most useful to make sense of particular issues in particular historical periods.
- Describe the relations between the public, private, and not-for-profit sectors as they effect politics, power, and policy making and explain how those relationships have changed over time.
- Describe the legislative process in the US and their state, offering specific examples of why some Bills become law and others do not.
- Develop and articulate a Theory of Change that encapsulates their own understanding of how political change has happened in the US in the past and of the ways in which political and policy changes that they care about might be enacted in the present and future.

Skills

- Design and execute an original multi-methods research project, including being able to: craft a well-formulated, researchable research question; develop credible hypotheses; produce a literature review that lays out the context in which their research will take place; design an appropriate means by which their hypotheses might be tested; conduct such original research; analyze those results using quantitative and/or qualitative methods, as appropriate; evaluate the meaning of their findings; produce visual representations (charts, graphs, tables) of their findings.
- Produce a polished, professional-quality Policy Brief.
- Design and execute a legislative advocacy strategy
- Identify sources for relevant, reliable, ethically gathered data and research and retrieve such data, evaluating its validity and reliability.
- Synthesize complex data and information and present it in written or oral form concisely and coherently.
- Effectively present research findings to a public audience, in-person and online.
- Communicate, in writing and verbally, clearly and professionally.
- Work effectively in groups and teams.
- Assume leadership roles if and when appropriate.
- Apply theories of leadership and management to their actually existing workplaces.
- Demonstrate capacity for graduate-level work in Public Policy, Public Administration, and related disciplines in the social sciences and human services.

Values

- Embody and act upon knowledge of cultural differences and an appreciation for the diversity of human experience and perspectives.
- Articulate the value of open democracy and engaged citizenship in building healthy communities at the local, national and global levels.
- Describe their own professional mission and their ethic of service.

Peter T. Paul College of Business and Economics

Lucy Gilson, Dean
Luciana Echazu, Associate Dean for Undergraduate Education
Victoria A. Parker, Associate Dean of Graduate Education and Faculty Administration

The Peter T. Paul College of Business and Economics (Paul College) empowers students to be mindful, dynamic leaders through rigorous academics and experiential-learning opportunities led by industry experts and researchers—creating an engaged academic and professional community. Paul College prepares students for careers in Business, Economics, and Hospitality Management. Each program has its unique disciplinary traditions and the simultaneous commitment to broad educational excellence in critical thought, communication, analytic skills, digital literacy, and ethical reasoning.

Paul College's undergraduate curricula combine a breadth of liberal education with specifics of professional education in business administration, economics, and hospitality management. In tandem with their studies at Paul College, undergraduates enrolled in Paul College programs take part of their coursework in other colleges in the University in order to fulfill the Discovery Program requirements. Beyond those requirements, students are encouraged to elect additional courses in the arts, social sciences, humanities, mathematics, and sciences. Thus, students who complete the Paul College programs in business administration and economics programs develop an impressive portfolio of marketable skills and knowledge base that may be applied to a variety of fields.

Accreditation

Peter T. Paul College of Business and Economics is accredited by the Association to Advance Collegiate Schools of Business (AACSB) for the degree programs of business administration and hospitality management.

Degrees

- Bachelor of Arts (B.A.) in Economics
- Bachelor of Science (B.S.) in Analytical Economics
- Bachelor of Science (B.S) in Business Administration

For information concerning advanced degrees, see the Graduate Catalog.

Degree Requirements

Paul College degree candidates must satisfy all of the University Discovery Program requirements for graduation as well as the particular requirements of their individual major programs. Modifications tend to occur in major(option) programs during the four-year period of a student's undergraduate career; Students are expected to conform to these changes. In addition, candidates must complete a math course (MATH 422 Mathematics for Business Applications, MATH 424A Calculus for Social Sciences, or equivalent transfer course. Economics majors must also satisfy specific requirements associated with the bachelor of arts degree (see bachelor of arts degree requirements).

In order to graduate, students must achieve a grade-point average of at least 2.3 (2.0 for the B.A. in economics) in the major courses and a minimum grade of C- (for graded courses) or CR (for credit/fail courses) in each major course. Course listings are provided by program, or in the case of business administration by department:

- Accounting and Finance (ACFI)
- Business Administration (ADMN)
- Decision Sciences (DS)
- Economics (ECON)
- Hospitality Management (HMGT)
- Management and Entrepreneurship (MGTE)
- Marketing (MKTG)

Prior to attaining junior rank, students will be considered "provisional Paul" students. Students are limited to two Paul College major required courses per semester during this period. A minimum overall GPA of 2.3 at UNH must be maintained by all Paul students in order to remain in the College. If the minimum overall GPA drops below 2.3 during the provisional period, the student will be placed on Paul College probation for one (1) semester. Failure to achieve a minimum overall GPA of 2.3 after the probationary semester will require the student to change to a major outside Paul College.

Paul College courses may not be taken on a pass/fail basis by a student majoring in business administration or economics. Any Paul College major required course in which a grade below C- is obtained must be repeated. No more than two Paul College courses may be repeated and each course may be repeated at most one time.

Students transferring into Paul College from other universities must have major courses reviewed and approved by the faculty through the Paul College Undergraduate Programs Office to be considered for major requirements. Transfer credit is normally granted only for 400- and 500-level courses, and normally only when the transferring institution is AACSB-accredited.

Paul College Programs

FIRE (First-year Innovation and Research Experience)

FIRE is an integrated, team-based, and game-like experience, developed for first-year students. Launched in the 2015-2016 academic year and under the direction of the Undergraduate Programs and Advising Office, this program was designed to expand upon the principles and mission of the Peer Advising program by engaging first-year students in developing habits and strategies for success. Students complete a one-credit, credit/fail course each semester (PAUL 405 FIRE: First-Year Innovation and Research Experience I/PAUL 406 First-Year Innovation and Research Experience II), guided by peer mentors (selected upper-class students) and alumni. Students collaborate and compete, both individually and in teams, through academic challenges, research, and game scenarios culminating in participation at the Undergraduate Research Conference (URC). PAUL 405 FIRE: First-Year Innovation and Research Experience I and PAUL 406 First-Year Innovation and Research Experience II are required for all first-year students.

More information can be found on the FIRE webpage.

FOCUS (Finding Opportunities, Careers, and University Success)

Dedicated to second-year student success**,** the FOCUS Program bridges academic and experiential learning through its emphasis on

skill development and exploration. Through PAUL 505 FOCUS: Finding Opportunities, Careers, and University Success, a two-credit, credit/fail course, students will explore academic pathways, prioritize personal and professional development opportunities, and connect their interests to future career opportunities. The FOCUS Program fosters an inclusive environment that elevates student well-being, university success, and career readiness. PAUL 505 is required for all second-year students.

International Programs

International education is a high priority of Paul College with many Education Abroad opportunities available. Through semester abroad and short-term programs, students have the ability to immerse themselves in a variety cultural environments to better prepare for a career in a globalized business industry. Paul College students may engage in a diverse array of opportunities:

- Study abroad in countries including, but not limited to: Australia, China, Hungary, Ireland, Italy, Korea, Portugal, and Spain
- Faculty-led programs to destinations such as Italy, Cuba, Greece, and England.
- International internships
- Research grant programs
- Volunteer or non-profit work

Students are encouraged to begin planning their international experiences early on in their academic careers by visiting the Paul College Undergraduate Programs and Advising Office. In most cases, students are able to take a semester abroad without losing any time towards graduation. Paul College students are highly encouraged to study abroad at schools accredited by the AACSB (Association to Advance Collegiate Schools of Business) and/or EQUIS (European Quality Improvement System). More information about international experiences can be found on the Paul College website as well as by programs offered through UNH Global.

Transfer Credit Policy

Students transferring credits from other universities to a Paul College major must have the courses reviewed and approved by the faculty through the Paul College Undergraduate Programs Office to be considered for major requirements. Transfer credit is normally granted only for 400- and 500-level courses, and normally only when the transferring institution is AACSB-accredited.

Current Enrolled UNH Student Transfer Credit Policy

All international and domestic transfer coursework must be approved in advance.

Subject to approval of each individual course, students may transfer from other universities:

- No more than 50% of the coursework for the option
- No more than 30% of the coursework for the major core courses

In total, Paul College students may transfer no more than 50% of their major coursework from domestic and study abroad programs combined.

External Transfer Student Transfer Credit Policy

All major related coursework taken prior to enrolling at UNH must be evaluated by the academic department. This review will determine if the course(s) will satisfy major requirements. Although the university may have accepted credit for your transfer courses, this does not necessarily mean they will satisfy specific major requirements. Students have up to one semester after matriculation to reconcile transfer credit.

After individual course evaluations:

- Students must complete at minimum of 6 major courses at UNH.
- Students must complete at least 50% of their option coursework at UNH.
- Students may transfer up to 50% of the coursework for the option and no more than 60% of their option and core coursework combined.

Advising System

Undergraduate advising in the Paul College is carried out jointly by dedicated academic advisors and faculty. The academic advisors are based in the Paul College Undergraduate Programs and Advising Office, where student academic records are kept. The advisors assist students in program planning, preregistration, understanding and meeting general academic/degree requirements, and general career planning. In addition, the advisors coordinate study abroad opportunties and cohort programs.

Undergraduates are encouraged to develop an advisory relationship with one or more faculty members with whom they have mutual interests. By providing their own experience and expertise, faculty may provide additional support to students for course, program, and career selection. All students are urged to seek as much assistance as they need from appropriate sources, but are reminded that theirs is the ultimate responsibility for knowing and meeting the various academic requirements for a degree.

Five-Year Programs

Four-One Program: BS – MSBA

The accelerated MS in Business Analytics program offers students the opportunity to start their graduate education while completing their undergraduate degree. This innovative program reduces the time required to earn a highly sought-after master's degree in BusinessAnalytics. Students take up to two dual-credit courses during their senior year, saving time and graduate tuition. Designed for students with a strong interest in data and analytics, this program emphasizes real-world applications, including coursework in Python programming and access to the UNH Center for Business Analytics. Application for admission is completed during the junior year, typically the semester prior to reaching 90 credits, and details are provided in the Programs of Study sections of this catalog and the Graduate Catalog.

Four-One Program: BS – MSE

The accelerated MS in Economics program is designed for students interested in careers in business, government, or academia. The program provides flexibility through its industry and academic tracks and enables students to gain real-world experience through an industry consulting project. Students begin their graduate studies with up to three dual-credit courses, saving both time and tuition while positioning themselves for success in fields requiring strong analytical and economic expertise. Application for admission is completed during the junior year, typically the semester prior to reaching 90 credits, and details are provided in the Programs of Study sections of this catalog and the Graduate Catalog.

Four-One Program: BS – MSF

The accelerated MS in Finance program allows students to begin their graduate education while completing their undergraduate degree,

preparing them for careers in financial management, investments, or fintech. This program enables students to take up to four dual-credit courses during their senior year, saving time and graduate tuition. Students can tailor their education by selecting a track in Financial Analytics and Fintech, Investments, or a Self-Directed option. Application for admission is completed during the junior year, typically the semester prior to reaching 90 credits, and details are provided in the Programs of Study sections of this catalog and the Graduate Catalog.

Four-One Program: BS – MBA

After completion of the bachelor's degree program, students may apply tothe Paul College Master of Business Administration full-time program.This innovative curriculum is designed specifically to accelerate yourprogress through this highly-ranked AACSB-accredited MBA program.Details are provided in the Programs of Study sections of this catalog andthe Graduate Catalog.

Four-One Program: BS – MSA

The American Institute of Certified Public Accountants (AICPA), thenational association of professional accountants, mandated that fiveyears of university education be required for national certified publicaccountant (CPA) certification as of the year 2000. Most states haveapproved similar requirements for licensing/certification. PaulCollege offers an accelerated master's program that can be completed in as little as 4.5 years, designed for students who desire aprofessional accounting career. The program leads to the joint awardingof a Bachelor of Science in Business Administration and a Master of Science in Accounting degree. Application for admission is completed during the junior year, typically the semester prior to reaching 90 credits. Details are provided in thePrograms of Study sections of this catalog and the Graduate Catalog.

Paul College—Minors and Courses for Non-majors

Minors

Paul College faculty has developed a group of courses for non-majors, which, when combined with certain other courses, can constitute a minor in Accounting and Financial Information, Business Administration, Economics, Entrepreneurship, Hospitality Management, Real Estate Finance and Investments, or Sales.

Non-majors

Paul College also serves the needs of undergraduates elsewhere in the University, within the limits of its resources, for whom selected courses in business administration, economics, or hospitality management are desirable complements to their primary course of study. To the extent that space is available after majors have enrolled, a limited number of Paul College courses are open to non-majors who have the prerequisite preparation. A maximum of 32 credits in courses offered by the Peter T. Paul College of Business and Economics may be taken by non-Paul College students. Students interested in these courses should contact the Paul College Undergraduate Programs and Advising Office.

Independent Study/Internship

Juniors or seniors in high academic standing in the Paul College may elect the internship or independent study course for variable credit. For either course, the student must secure a faculty sponsor in the area of interest and submit a written proposal prior to the start of the semester in which the project is to be undertaken. Independent study normally involves research, while internships are usually undertaken with cooperation of an off-campus organization and involve a non-routine but practical application of skills and concepts acquired in a student's program.

Independent studies and internships require considerable self-direction and self-monitoring on the part of the student, who must be in high academic standing. Careful prior review of requirements with the undergraduate adviser and faculty sponsor is necessary. Students may earn no more than 16 credits combined in internships, independent studies, field experience, and supervised student teaching experience.

https://paulcollege.unh.edu/

Departments

- Business Administration (p. 699)
- Economics (p. 723)
- Hospitality Management (p. 729)

Programs of Study

- Accounting and Finance (p. 697)
- Business Administration (ADMN) (p. 699)
- EcoGastronomy (p. 723)
- Economics (ECON) (p. 723)
- Entrepreneurship (p. 729)
- Hospitality Management (HMGT) (p. 729)
- Sales (p. 730)

Accounting and Finance

- Accounting and Financial Information (Minor) (p. 697)
- Real Estate Finance and Investments (Minor) (p. 698)

Accounting and Financial Information (Minor)

https://www.unh.edu/program/minor/accounting-financial-information

Description

The **Minor in Accounting and Financial Information** course of study will help students develop a stronger understanding of the accounting data used for analytical decision-making across all disciplines. Accounting is "the language of business" and every entity uses accounting information for decision-making purposes.

Professionals with greater accounting knowledge can provide greater value to clients and employers by understanding not just "top-level" numbers, but also the relationships between these numbers and how accounting choices and management decisions influence these numbers. Complementing competency in other disciplines, the Minor in Accounting and Financial Information will enable students with the knowledge and skills needed to measure and analyze the effects of business decisions and transactions. Further, the minor will help students understand how specific accounting choices can alter the information used in decision-making and affect outcomes. These skills are critical regardless of career path or employer type (i.e.,corporations, small and

medium sized businesses, start-ups, government entities and non-profit organizations all use accounting information for decision-making purposes).

The Minor in Accounting and Financial Information will provide students with a broader set of career opportunities and a knowledge base that enhances their judgment and decision-making skills both in their professional career and personal lives.

Requirements

Academic policies related to Minors.

The Minor in Accounting and Financial Information is open to both Paul College and Non-Paul College students. Paul College students must complete Path 1 all other students can select Path 1 or 2. The minor consists of two required courses (8 credits) and three elective courses (12 credits).

- A minor consists of 20 semester hours with a grade of C- or better and a 2.0 grade point average.
- Courses taken on a pass fail basis my not be used to satisfy minor requirements.
- No more than 8 credits used to satisfy major requirements may be used for the minor.
- Students are responsible for checking pre-requisites for all courses listed.
- All transfer courses must be evaluated for equivalency.
- No more than two transfer courses may be applied to the minor.
- Capacity may be limited.

Code	Title	Credits
PATH 1: Paul College Students		
Required Courses		
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
Select three Elective Courses		12
PATH 2: Non-Paul College Students		
Required Courses		
ACC 501	Survey of Accounting	4
ACC 520	Topics in Accounting (Survey of Accounting II) [1]	4
Select three Elective Courses		12

Code	Title	Credits
Electives [2]		
Three elective courses are required.		
Select a minimum of two ACC elective courses from the following:		
ACC 621	Intermediate Financial Accounting I	
ACC 622	Intermediate Financial Accounting II	
ACC 623	Advanced Managerial Accounting	
ACC 626	Introduction to Federal Taxation	
ACC 627	Financial Statement Analysis	
ACC 620	Topics in Accounting (Accounting Analytics) [1]	
Additional Elective Courses		
If only two ACC courses are selected one additional elective course must be selected from the following:		
PAUL 450	Personal Finance (If only two ACC courses are selected one additional elective from the below:)	
HMGT 618	Uniform Systems for the Hospitality Industry	
HMP 740	Health Care Financial Management (department approval required)	
TECH 750	Intellectual Asset Management for Engineers and Scientists (department approval required, fall semester course only)	
Additional course(s) by petition to the Department of Accounting and Finance		

1 For course as “Topics in Accounting” (or equivalent), please make sure that the course has the same title (not simply the same number) as the listed course for it to count for the minor.

2 Suggested Pathways: The Minor has been designed to allow students from varied backgrounds to pursue study in accounting. The following are NOT required but simply presented as possible groups of courses representing what may be an underlying motivation for studying this Minor.

Code	Title	Credits
Suggested Paths and Elective Course Selection [2]		
Certified Management Accountant (CMA) or Chartered Global Management Accountant (CGMA)		
ACC 621	Intermediate Financial Accounting I	
ACC 623	Advanced Managerial Accounting	
ACC 627	Financial Statement Analysis	
Chartered Financial Analyst (CFA) and Financial Analytics		
ACC 621	Intermediate Financial Accounting I	
ACC 622	Intermediate Financial Accounting II	
ACC 627	Financial Statement Analysis	
or ACC 620	Topics in Accounting	
Management Accounting		
ACC 621	Intermediate Financial Accounting I	
ACC 623	Advanced Managerial Accounting	
HMGT 618	Uniform Systems for the Hospitality Industry	
or HMP 740	Health Care Financial Management	
or TECH 750	Intellectual Asset Management for Engineers and Scientists	
Certified Financial Planner (CFP) and Personal Finance		
ACC 626	Introduction to Federal Taxation	
PAUL 450	Personal Finance	
ACC 620	Topics in Accounting (Accounting Analytics)	
or ACC 621	Intermediate Financial Accounting I	
or ACC 623	Advanced Managerial Accounting	

Real Estate Finance and Investments (Minor)

https://www.unh.edu/program/minor/real-estate-finance-investments

Description

The Minor in Real Estate Finance and Investments will prepare students from various backgrounds for a career in the real estate industry. The curriculum is practice-oriented and will develop students’ analytical and problem-solving skills, especially as pertains to finance and real estate. Further, the coursework and related training will enhance a students’ ability to communicate financial information. The Minor is designed to be aligned with the real estate industry’s trends and demands, and it will provide students with exposure to the many aspects of real estate, including investing, financing, appraisal, law, regulation, development, property management, and local and regional real estate rules and regulations.

Coursework for the minor provides students with the foundation required for more advanced study of real estate finance, including critical concepts of time value of money and capital budgeting. Required coursework is additionally aimed at preparing students for the New Hampshire real estate licensing exam and directly related to functional areas of the real estate industry (property development, law, and internship). Students select the final course to complete the minor from a list of approved elective courses offered in a variety of interest areas.

Real estate is relevant to individual lives and practically all aspects of our society. The Minor is intended for undergraduate students from all majors of UNH to develop a strong acumen of real estate finance. In addition, certain majors may have strong synergies with this course of study. This Minor can be particularly beneficial for students majoring in Business Administration, Hospitality Management, Economics, Geography, History, Sociology, Civil and Environmental Engineering, Community and Environmental Planning, and Environmental Sciences to gain valuable knowledge and skills and prepare them for their chosen career path, including in the real estate industry.

Requirements

Academic policies related to Minors.

Minor Requirements

- Students must complete five courses for a total of 20 credits with a grade of C- or better and a 2.0 GPA.
- Students are responsible for checking and fulfilling any prerequisites for courses listed.
- No more than 8 credits used to satisfy Major requirements may be used for the Minor.
- No more than 8 credits may be from transfer coursework.
- Courses taken on a pass/fail basis may not be used for a Minor.

Code	Title	Credits
Required Courses		
ADMN 570	Introduction to Financial Management	4
or FIN 501	Survey of Finance	
or HMGT 655	Hospitality Finance and Development	
FIN 608	Real Estate Finance	4
CEP 672	Fundamentals of Real Estate	4
FIN 620	Topics in Finance I (Real Estate Development and Law) [1]	4
or FIN 695	Real Estate Internship	
Select one additional course from the following:		4
FIN 620	Topics in Finance I (Real Estate Development and Law) [1]	
FIN 695	Real Estate Internship	
ACC 501	Survey of Accounting	
ADMN 502	Financial Accounting	
ECON 653	Law and Economics	
ECON 706	Economics of Climate Change	
HMGT 681	Contemporary Resort Development and Management	
HMGT 798	Topics (Hospitality Asset and Financial Management) [1]	
CEE 520	Environmental Pollution and Protection: A Global Context	
CEP 508	Applied Community Development	
CEP 673	Green Real Estate	
NR 784	Sustainable Living - Global Perspectives	
GEOG 405	There Is No Planet B	
GEOG 582	Global Trade and Local Development	
GEOG 591	Making Maps: GIS Fundamentals	
HIST 511	History of New Hampshire	
HIST 618	American Environmental History	
SOC 693	Global Change and Social Sustainability	
SOC 730	Communities and the Environment	
Total Credits		**20**

[1] If a course is listed with "Topics" in the title, students must take the specified section of the course matching the title noted in parenthesis for the course to count towards the minor.

Students may petition to substitute one course on the list by a course of choice approved by the Minor Program Coordinator, provided that university policy for minors is followed.

Student Learning Outcomes

Program Learning Outcomes

- Students will demonstrate knowledge of basic areas of finance and investments as they are related to real estate.
- Students will demonstrate familiarity in subjects pertaining to national and regional real estate, such as types of property ownership, financing, contracts, appraisal, brokerage, property listings, commissions, and property management.
- Students will demonstrate analytical skills in real estate property budgeting and valuations.
- Students will demonstrate the ability to review and analyze real estate capital markets, mortgages, and investments.
- Students will demonstrate an understanding of the development process, product assessment, and legal considerations in the real estate industry.

Business Administration (ADMN)

The business administration program provides students with the pillars of a business education as well as specialized options to propel them on their career paths. The curriculum consists of fifteen core courses as well as option/major courses, which imparts students with expertise in one or two areas of business. At the same time, Paul College students achieve a well-rounded education by selecting courses in the liberal arts and the sciences from other colleges and schools in the University, including to complete University Discovery requirements.The Peter T. Paul College's program in business administration is accredited by the Association to Advance Collegiate Schools of Business (AACSB) and is separate from the business program at the UNH-Manchester campus.

Core Curriculum

The business administration's core curriculum constitutes the fundamental theories, principles, concepts, and skill sets necessary for students to thrive in the professional business world. Each required core course equips students with the knowledge and skills utilized in key areas of business, while building upon their social, competitive, and analytical intelligence. The business administration program also augments its core curriculum with math, ethics, and economics.

In order to graduate, students must achieve a grade-point average of at least 2.3 in the major courses and a minimum grade of C- in each Paul College major course. Core courses are generally completed in the first five semesters of enrollment at Paul College, with the exception of the capstone course.

Options in the Business Administration Program

As students advance, they must declare an option within the business administration program (students can complete two options by choice and only course course can overlap between the two options). Declaration of an option occurs during second semester sophomore year, thus focusing on a particular area of business during their last two years.

The option declaration date is February 15th of the sophomore year. Students are encouraged to discuss their interests with several faculty

members and an academic adviser in this decision-making process. Options comprise a minimum of five courses, but requirements do vary by option and are determined by the nature of the career field. Current business administration options are:

- Accounting
- Entrepreneurial Studies
- Finance
- Hospitality Management
- Information Systems and Business Analytics
- International Business and Economics
- Management
- Marketing
- Supply Chain Management
- Student-Designed

Due to the dynamic nature of the business world, the portfolio of options offered may change from time to time. Students are expected to stay attuned to these changes through Paul College Undergraduate Programs and Advising Office. A change of option/major may only be made once per semester.

Business in Practice (BiP) Program

The Business in Practice (BiP) program enhances Paul College's rigorous academics by bridging the gap between theory and practical application. Through experiential learning projects, you work directly with industry leaders and companies to acquire a deeper grasp of real business issues and responsibilities, giving you the tools, skills and know-how to launch a successful and meaningful business career. The program is designed to be flexible and optimizes your skill level in key intelligence areas most valued by employers.

BiP INTELLIGENCES AND LEARNING GOALS

Students take a minimum of two courses*, one in each intelligence area:

- PAUL 670 BiP-Analytical Intelligence Topics - ability to analyze and evaluate ideas, solve problems and make decisions.
- PAUL 680 BiP-Competitive & Professional Intelligence Topics - ability to gather, analyze and distribute information and ideas about products, customers, competitors or the external environment and professional development.

*Other Paul College courses may be assigned a BiP Intelligence attributes and satisfy a BiP course requirement. Please check with Paul College Undergraduate Programs Office for other potential courses designated with a BiP Intelligence attribute.

https://paulcollege.unh.edu/business-administration

Programs

- Business Administration Major (B.S.) (p. 700)
- Business Administration Major: Accounting Option (B.S.) (p. 702)
- Business Administration Major: Entrepreneurial Studies Option (B.S.) (p. 704)
- Business Administration Major: Finance Option (B.S.) (p. 706)
- Business Administration Major: Hospitality Management Option (B.S.) (p. 708)
- Business Administration Major: Information Systems and Business Analytics Option (B.S.) (p. 710)
- Business Administration Major: International Business and Economics Option (B.S.) (p. 712)
- Business Administration Major: Management Option (B.S.) (p. 714)
- Business Administration Major: Marketing Option (B.S.) (p. 716)
- Business Administration Major: Student Designed Option (B.S.) (p. 718)
- Business Administration Major: Supply Chain Management Option (B.S.) (p. 720)
- Business Administration Minor (p. 722)
- Pre-Business Path (B.S.) (p. 722)

Faculty

Business Administration Department Faculty

Business Administration Major (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration

Description

A Bachelor of Science in business administration will help you build the skills, knowledge and experience to land a job and thrive in today's evolving economy. Graduates are in demand in a variety of industries including accounting, finance, information systems and business analytics, management and marketing. Whether you aspire to work for a high-powered firm, start-up or non-profit or launch your own business, a business administration degree opens the doors to many career opportunities.

At Paul College, students in the business administration major take foundation courses in their freshman and sophomore years that cover the fundamental theories, principles, concepts and skill sets in key areas of business, while building upon their social, analytical, competitive and professional intelligence. These foundation courses prepare you to move into a variety of fields and companies. You also must declare an option within your major during the second semester of your sophomore year that provides deeper expertise in a specific business area to propel you on your career path. Many students choose more than one! Options within the major include: accounting, entrepreneurial studies, finance, hospitality management, information systems and business analytics, international business and economics, management, marketing, supply chain management, and student designed.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

The following courses are major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted in those program descriptions. For a detailed schedule/plan of study for each option, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

A typical plan of study follows, showing the major-required courses.

Code	Title	Credits
Business Administration core requirements		
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 403	Computing Essentials for Business	1
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4
ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ADMN 775	Strategic Management: Decision Making (Capstone) [1]	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
or MATH 425	Calculus I	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics [2]	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics [2]	2

[1] This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ADMN 401W or ADMN 410	Introduction to Responsible Business Management or Management Information Systems	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
MATH 422 or MATH 424A or ENGL 401	Mathematics for Business Applications or Calculus for Social Sciences or First-Year Writing	4
Discovery Course		4
ADMN 403	Computing Essentials for Business	1
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401 or MATH 422 or MATH 424A	First-Year Writing or Mathematics for Business Applications or Calculus for Social Sciences	4
Discovery Course		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery Course		4
Discovery Course		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ADMN 503	Managerial Accounting	4
ADMN 570 or ADMN 575 or ADMN 580 or ADMN 585	Introduction to Financial Management or Behavior in Organizations or Quantitative Decision Making or Marketing	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
	Total Credits	**69**

Student Learning Outcomes

Program Learning Outcomes

Business Concepts & Analytical Reasoning Goal 1: Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.
- Apply data-driven reasoning to business decisions using appropriate analytical approaches.

Communication & Collaboration Goal 2: Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Global & Social Responsibility Goal 3: Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions.

Business Administration Major: Accounting Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration-accounting

Description

The Option in Accounting prepares students for careers in a "recession proof profession" with excellent placement and salary statistics.

Accounting is referred to as the "language of business" because all businesses rely on accounting information for decision-making.

Because accounting is inherently subjective, accounting students learn the analytical skills necessary to make idiosyncratic decisions.

However, in contrast to other professions, accountants also learn a technical knowledge base that allows them to understand how accounting choices can affect the information used for decision-making in all disciplines. This deeper understanding of business data helps accounting professionals provide value to clients and employers.

Because every business relies on accounting information, accounting students can select an industry and position that aligns with their personal interests. Examples of commonly selected positions include audit, tax, financial consulting, and management. The Option provides students with the requisite knowledge to obtain certifications in a variety of areas, including accounting (CPA), management (CMA), internal auditing (CIA), forensics (CFE), and information systems (CISA). In addition to obtaining an undergraduate degree in four years or less, students can apply to the MSA Financial Leadership in Accounting (MSA FLA) pathway to earn both a B.S. and a M.S. in Accounting in 4.5 years. This unique program positions students as a leader in the field and allows them to save on tuition without delaying their entry into the profession. The MSA FLA provides a structured route to two degrees and well-paid internship opportunities. Students may also take advantage of the four-one (5 year) program to earn a M.S. in Accounting at Paul College, which can speed career progression. Irrespective of the position or educational pathway an individual student selects, the demand for accounting professionals exceeds supply, making accounting a great career choice.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A typical plan of study follows, showing the major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted. For an individual schedule/plan of study, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

Code	Title	Credits
Required Courses		
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 403	Computing Essentials for Business	1
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4
ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics	2
Capstone		
ADMN 775	Strategic Management: Decision Making [1]	4
Total Credits		**61**

Code	Title	Credits
Accounting Option Requirements		
Required Courses		
ACC 621	Intermediate Financial Accounting I	4
ACC 622	Intermediate Financial Accounting II	4
ACC 623	Advanced Managerial Accounting	4
ACC 626	Introduction to Federal Taxation	4
ACC 724	Auditing	4
ACC 747	Business Law	4
Select one course from the following:		4

ACC 620	Topics in Accounting (Accounting Analytics)	
ACC 627	Financial Statement Analysis	
ACC 751	Forensic Accounting and Fraud Examination	
ACC 725	Independent Studies in Accounting	
ACC 799	Honors Thesis in Accounting	
Total Credits		**28**

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

[1] This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ADMN 401W or ADMN 410	Introduction to Responsible Business Management or Management Information Systems	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
Discovery		
ADMN 403	Computing Essentials for Business	1
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**14**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401	First-Year Writing	4
Discovery		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery		4
Discovery		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ADMN 503	Managerial Accounting	4
ADMN 570 or ADMN 575	Introduction to Financial Management or Behavior in Organizations	4
Discovery		4
Discovery		4
	Credits	**16**
Third Year		
Fall		
ADMN 575 or ADMN 570	Behavior in Organizations or Introduction to Financial Management	4
ADMN 580 or ADMN 585	Quantitative Decision Making or Marketing	4
ACC 621	Intermediate Financial Accounting I	4
Discovery		4
PAUL 670 or PAUL 680	BiP-Analytical Intelligence Topics or BiP-Competitive & Professional Intelligence Topics	2
	Credits	**18**
Spring		
ACC 622	Intermediate Financial Accounting II	4
ADMN 585 or ADMN 580	Marketing or Quantitative Decision Making	4
Accounting option course		4
Course selected in consultation with advisor [1]		4
PAUL 680 or PAUL 670	BiP-Competitive & Professional Intelligence Topics or BiP-Analytical Intelligence Topics	2
	Credits	**18**
Fourth Year		
Fall		
ADMN 775 & ADMN 700	Strategic Management: Decision Making and PAUL Assessment of Core Knowledge	4
Accounting option course		4
Accounting option course		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
Accounting option course		4
Accounting option course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**133**

[1] Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.
- Apply data-driven reasoning to business decisions using appropriate analytical approaches.

Goal 2: Communication & Collaboration, Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Goal 3: Global & Social Responsibility, Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions.

Business Administration Major: Entrepreneurial Studies Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration-entrepreneurial-studies

Description

The Option in Entrepreneurial Studies is designed for students interested in entrepreneurship and creativity and who seek to learn about starting high growth business, working for a new venture, investing in start-ups or becoming involved in a new venture creation within an established organization. The ES option fosters an entrepreneurial culture throughout the program with a priority on applied learning in the dynamic environment of entrepreneurial ventures. Students apply what they've learned to a senior project and in conducting due diligence for investors. The ES option studies entrepreneurship from the entrepreneurs, employees and the investor's perspective.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.

**Major GPA requirements as indicated.*

Major Requirements

A typical plan of study follows, showing the major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted. For an individual schedule/plan of study, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

Code	Title	Credits
Required Courses		
ADMN 403	Computing Essentials for Business	1
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4
ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics	2
Capstone		
ADMN 775	Strategic Management: Decision Making [1]	4

[1] This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

Option in Entrepreneurial Studies

Code	Title	Credits
Required		
MGT 636	Introduction to Entrepreneurship	4
DS 741	Startup Analytics	4
DS 743	Venture Scaling Strategies	4
MGT 733	Launch Ready: The Entrepreneur's Capstone	4
Elective		
Select one course from the following:		4
MKTG 763	Marketing Analytics	
MKTG 764	New Product Development	
MKTG 760	International Marketing	
FIN 701	Financial Policy	
FIN 705	Financial Institutions	
FIN 711	Investment Banking	
ACC 620	Topics in Accounting	
ACC 623	Advanced Managerial Accounting	

ACC 627	Financial Statement Analysis
DS 772	Predictive Analytics and Modeling
SC 680	Global Supply Chain Management
MGT 666	Strategic Negotiation and Conflict Management
MGT 755	Managing Business and People Across Borders
HMGT 698	Topics
HMGT 758	Revenue Management: The Art of Pricing
Total Credits	**20**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
ADMN 401W or ADMN 410	Introduction to Responsible Business Management or Management Information Systems	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
Discovery		4
ADMN 403	Computing Essentials for Business	1
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401	First-Year Writing	4
Discovery		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery		4
Discovery		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ADMN 503	Managerial Accounting	4
ADMN 585 or ADMN 575	Marketing or Behavior in Organizations	4
Discovery		4
Discovery		4
	Credits	**16**
Third Year		
Fall		
ADMN 575 or ADMN 585	Behavior in Organizations or Marketing	4
ADMN 570 or ADMN 580	Introduction to Financial Management or Quantitative Decision Making	4
MGT 636	Introduction to Entrepreneurship	4
Discovery		4
PAUL 670 or PAUL 680	BiP-Analytical Intelligence Topics or BiP-Competitive & Professional Intelligence Topics	2
	Credits	**18**
Spring		
ADMN 580 or ADMN 570	Quantitative Decision Making or Introduction to Financial Management	4
MKTG 763 or MKTG 764 or MKTG 760 or FIN 701 or FIN 705 or FIN 711 or ACC 620 or ACC 623 or ACC 627 or DS 772 or SC 680 or MGT 666 or MGT 755 or HMGT 758 or HMGT 698	Marketing Analytics or New Product Development or International Marketing or Financial Policy or Financial Institutions or Investment Banking or Topics in Accounting or Advanced Managerial Accounting or Financial Statement Analysis or Predictive Analytics and Modeling or Global Supply Chain Management or Strategic Negotiation and Conflict Management or Managing Business and People Across Borders or Revenue Management: The Art of Pricing or Topics	4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
PAUL 680 or PAUL 670	BiP-Competitive & Professional Intelligence Topics or BiP-Analytical Intelligence Topics	2
	Credits	**18**
Fourth Year		
Fall		
DS 741	Startup Analytics	4
DS 743	Venture Scaling Strategies	4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
ADMN 775 & ADMN 700	Strategic Management: Decision Making and PAUL Assessment of Core Knowledge	4
MGT 733	Launch Ready: The Entrepreneur's Capstone	4
Course selected in consultation with advisor [1]		4

Course selected in consultation with advisor [1]	4
Credits	**16**
Total Credits	**137**

[1] Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.
- Apply data-driven reasoning to business decisions using appropriate analytical approaches.

Goal 2: Communication & Collaboration, Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Goal 3: Global & Social Responsibility, Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions

Business Administration Major: Finance Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration-finance

Description

The Option in Finance provides students with the knowledge and analytical skills necessary to make informed financial decisions for themselves and their organizations. Business students interested in numbers, quantitative analysis, problem solving, utilizing creativity, and practical applications will appreciate this option. Opportunities exist in a variety of fields, including commercial and investment banking, insurance, corporate finance, money management, venture capital, risk management, and real estate.

The job outlook for finance students is strong, and starting and mid-career salaries are typically among the highest of all majors at a university. Many premier jobs in business, such as hedge fund manager, investment banker, and CFO, are in finance.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A typical plan of study follows, showing the major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted. For an individual schedule/plan of study, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

Code	Title	Credits
Required Courses		
ADMN 403	Computing Essentials for Business	1
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4
ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ADMN 775	Strategic Management: Decision Making [1]	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics	2

[1] This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

Option in Finance

Code	Title	Credits
Required Courses		
FIN 701	Financial Policy	4
FIN 702	Investments Analysis	4
Electives		
Select three courses from the following:		12
Must select at least one course from the Core and Exploration elective categories below.		
Core Electives		
Select at least one course from the following:		
FIN 608	Real Estate Finance	
FIN 703	International Financial Management	
FIN 704	Derivatives Securities and Markets	
FIN 705	Financial Institutions	
FIN 706	Financial Modeling and Analytics	
FIN 707	Equity Analysis and Firm Valuation	
FIN 709	Fixed Income Analysis and Valuation	
Exploration Electives		
Select at least one course from the following:		
ACC 724	Auditing [1]	
DS 775	Corporate Project Experience [1]	
FIN 620	Topics in Finance I	
FIN 710	Big Data in Finance	
FIN 711	Investment Banking	
FIN 720	Topics in Finance II	
FIN 720W	Topics in Finance II	
SC 775	Supply Chain Management Project Experience [1]	
Additional course by petition approved by Finance Option Coordinator		
Total Credits		**20**

[1] Requires pre-requisites outside of finance option.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ADMN 401W or ADMN 410	Introduction to Responsible Business Management or Management Information Systems	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
ADMN 403	Computing Essentials for Business	1
Discovery		4
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401	First-Year Writing	4
Discovery		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery		4
Discovery		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ADMN 503	Managerial Accounting	4
ADMN 570	Introduction to Financial Management	4
Discovery		4
Discovery		4
	Credits	**16**
Third Year		
Fall		
ADMN 580	Quantitative Decision Making	4
ADMN 575 or ADMN 585	Behavior in Organizations or Marketing	4
FIN 701 or FIN 702	Financial Policy or Investments Analysis	4
Discovery		4
PAUL 670 or PAUL 680	BiP-Analytical Intelligence Topics or BiP-Competitive & Professional Intelligence Topics	2
	Credits	**18**
Spring		
FIN 702 or FIN 701	Investments Analysis or Financial Policy	4
ADMN 585 or ADMN 575	Marketing or Behavior in Organizations	4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
PAUL 680 or PAUL 670	BiP-Competitive & Professional Intelligence Topics or BiP-Analytical Intelligence Topics	2
	Credits	**18**
Fourth Year		
Fall		
Finance option course		4
Finance option course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
ADMN 775 & ADMN 700	Strategic Management: Decision Making and PAUL Assessment of Core Knowledge	4
Finance option course		4

Course selected in consultation with advisor [1]	4
Course selected in consultation with advisor [1]	4
Credits	**16**
Total Credits	**137**

[1] Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.
- Apply data-driven reasoning to business decisions using appropriate analytical approaches.

Goal 2: Communication & Collaboration, Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Goal 3: Global & Social Responsibility, Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions.

Business Administration Major: Hospitality Management Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration-hospitality-management

Description

The Hospitality Management option in the BS in Business Administration is a specialized program that blends fundamental business principles with a focus on the hospitality industry. Students will be equipped with knowledge and skills essential for managing various facets of hospitality operations, including hotels, restaurants, resorts, and event planning. The required business core courses provide a solid and rigorous foundations in areas like finance, marketing, human resources management, and strategic planning; while the hospitality management specific courses explore industry specific issues, trends, and best practices. The goal is to prepare graduates for leadership roles within the hospitality sector, where they can oversee operations, develop strategies to enhance guest experiences, and drive business growth.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A typical plan of study follows, showing the major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted. For an individual schedule/plan of study, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

Code	Title	Credits
Required Courses		
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 403	Computing Essentials for Business	1
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4
ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ADMN 775	Strategic Management: Decision Making [1]	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics	2

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

Code	Title	Credits
Option in Hospitality Management [2]		
Required Courses		
HMGT 601	Management of Customer Services and Experiences	4
HMGT 775	Modern Operations and Innovations in Hospitality and Tourism	4
Sectoral Electives		
Select one course from the following:		
HMGT 661	Event Design, Planning, and Management	
HMGT 681	Contemporary Resort Development and Management	
HMGT 798	Topics	
Functional Electives		

Select two courses from the following:

HMGT 655	Hospitality Finance and Development
HMGT 758	Revenue Management: The Art of Pricing
HMGT 667	Advanced Food & Beverage Operations & Event Management

[1] This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

[2] Students must complete a minimum of two courses at the 700-level in the option.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ADMN 401W or ADMN 410	Introduction to Responsible Business Management or Management Information Systems	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
Discovery Course		4
ADMN 403	Computing Essentials for Business	1
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401	First-Year Writing	4
Discovery Course		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery Course		4
Discovery Course		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ADMN 503	Managerial Accounting	4
ADMN 585 or ADMN 575	Marketing or Behavior in Organizations	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
ADMN 575 or ADMN 585	Behavior in Organizations or Marketing	4
ADMN 570 or ADMN 580	Introduction to Financial Management or Quantitative Decision Making	4
HMGT 601	Management of Customer Services and Experiences	4
Discovery Course		4
PAUL 670 or PAUL 680	BiP-Analytical Intelligence Topics or BiP-Competitive & Professional Intelligence Topics	2
	Credits	**18**
Spring		
ADMN 580 or ADMN 570	Quantitative Decision Making or Introduction to Financial Management	4
Hospitality Management elective		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
PAUL 680 or PAUL 670	BiP-Competitive & Professional Intelligence Topics or BiP-Analytical Intelligence Topics	2
	Credits	**18**
Fourth Year		
Fall		
ADMN 775 & ADMN 700	Strategic Management: Decision Making and PAUL Assessment of Core Knowledge	4
Hospitality Management elective		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
HMGT 775	Modern Operations and Innovations in Hospitality and Tourism	4
Hospitality Management elective		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**137**

[1] Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.
- Apply data-driven reasoning to business decisions using appropriate analytical approaches.

Goal 2: Communication & Collaboration, Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Goal 3: Global & Social Responsibility, Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions.

Business Administration Major: Information Systems and Business Analytics Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration-information-systems-business-analytics

Description

The Option in Information Systems and Business Analytics (ISBA) will appeal to students who wish to learn how to take advantage of contemporary technologies to solve complex business problems. Pivotal contributors to the success of any venture must be able to understand and communicate both the business needs as well as the technical details of solutions. The option prepares students for a career in a wide range of industries by helping them master the fundamentals of information systems and business analytics, as well as the ability to implement solutions or provide leading-edge, analytics-based solutions to real business problems. Students work on real-world industry projects and apply concepts and problem-solving skills learned in the classroom. All students in the option develop functional knowledge and skills in information systems and business analytics. Beyond the required courses in the option, students may choose between an emphasis in Information Systems or an emphasis in Business Analytics. The ISBA option can be completed as a single or dual option. In either case, the graduate will have tangible knowledge and skills. Regardless of one's interest area or degree, employers look for people that can help them solve problems efficiently and effectively. The ISBA option prepares students to do just that, and continue learning as technology and business continue to change.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A typical plan of study follows, showing the major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted. For an individual schedule/plan of study, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

Code	Title	Credits
Required Courses		
ADMN 403	Computing Essentials for Business	1
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4
ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics	2
Capstone		
ADMN 775	Strategic Management: Decision Making [1]	4

Code	Title	Credits
Information Systems and Business Analytics Option Requirements		
Required Courses		
DS 673	Database Management	4
DS 775	Corporate Project Experience	4
Electives [2]		
Select two DS courses from the following:		8
DS 662	Programming for Business	
DS 671	Data Visualization and Prescriptive Analytics	
DS 774	AI and Emerging Technologies in Business	
DS 772	Predictive Analytics and Modeling	
DS 620	Topics in Decision Sciences	
DS 720	Topics in Decision Sciences II	
DS 799H	Honors Thesis in Decision Sciences	
Select one additional elective from DS list or outside of the department from list below:		4
ACC 620	Topics in Accounting	
MATH 426	Calculus II	
FIN 706	Financial Modeling and Analytics [3]	
FIN 710	Big Data in Finance [3]	
IT 666	Cybersecurity Practices	
MKTG 763	Marketing Analytics [3]	

SC 680	Global Supply Chain Management	
Total Credits		**20**

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

1 This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

2 A minimum of two electives must be DS courses. Only one course can overlap between options.

4 May be taken only by students completing 2nd option in Accounting, Finance or Marketing.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ADMN 401W	Introduction to Responsible Business Management	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
Discovery		4
ADMN 403	Computing Essentials for Business	1
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401	First-Year Writing	4
Discovery		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery		4
Discovery		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ADMN 503	Managerial Accounting	4
ADMN 580	Quantitative Decision Making	4
Discovery		4
Discovery		4
	Credits	**16**
Third Year		
Fall		
ADMN 570	Introduction to Financial Management	4
ADMN 585 or ADMN 575	Marketing or Behavior in Organizations	4
DS 673	Database Management	4
Discovery		4
PAUL 680 or PAUL 670	BiP-Competitive & Professional Intelligence Topics or BiP-Analytical Intelligence Topics	2
	Credits	**18**
Spring		
ADMN 575 or ADMN 585	Behavior in Organizations or Marketing	4
ISBA option course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
PAUL 670 or PAUL 680	BiP-Analytical Intelligence Topics or BiP-Competitive & Professional Intelligence Topics	2
	Credits	**18**
Fourth Year		
Fall		
ADMN 775 & ADMN 700	Strategic Management: Decision Making and PAUL Assessment of Core Knowledge	4
ISBA option course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
DS 775	Corporate Project Experience	4
ISBA option course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**137**

1 Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.
- Analyze organizational challenges and opportunities using core business concepts.

Goal 2: Communication & Collaboration, Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Goal 3: Global & Social Responsibility, Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions.

Business Administration Major: International Business and Economics Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration-international-business-economics

Description

The Option in International Business and Economics offers an interdisciplinary course of study, providing strong business training for students pursuing careers at organizations with an international focus, particularly in multinational corporations, international banks, and government agencies. It achieves this by combining general business training with in-depth knowledge in economics, finance, and management. Students are strongly encouraged to round out their education with either an internship at an international organization or by studying abroad for one semester.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A typical plan of study follows, showing the major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted. For an individual schedule/plan of study, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

Code	Title	Credits
Required Courses		
ADMN 403	Computing Essentials for Business	1
ADMN 401W	Introduction to Responsible Business Management	4
or ADMN 410	Management Information Systems	
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4
ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics	2
Capstone		
ADMN 775	Strategic Management: Decision Making [1]	4
Total Credits		**61**

Code	Title	Credits
International Business and Economics Option Requirements		
Required Courses		
ECON 645	International Economics	4
MGT 655	Doing Business Globally	4
Select three courses from the following: [2]		12
ECON 655	Innovation in the Global Economy (Spring only)	
FIN 703	International Financial Management	
MKTG 760	International Marketing (Fall only)	
MGT 755	Managing Business and People Across Borders	
SC 680	Global Supply Chain Management	
International Experience		
Select one of the following:		4
A one-semester (8 weeks or longer) study abroad experience. Must involve at least one approved International Business or Economics Course.		
A shorter term Faculty-Led international program (e.g., J-Term or Summer international trip)		
A 1-4 credit internship at an International Organization (must be approved prior to the beginning the internship.)		
Total Credits		**24**

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

1 This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

[2] Students can tailor their option by specializing in International Trade and Finance (ITF) or International Business (IB). For ITF select ECON 655 and FIN 703. For IB select ECON 655, MGT 755, MKTG 760 or SC 680

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ADMN 401W or ADMN 410	Introduction to Responsible Business Management or Management Information Systems	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
ADMN 403	Computing Essentials for Business	1
Discovery		4
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401	First-Year Writing	4
Discovery		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery		4
Discovery		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ADMN 503	Managerial Accounting	4
ADMN 575 or ADMN 570	Behavior in Organizations or Introduction to Financial Management	4
Discovery		4
Discovery		4
	Credits	**16**
Third Year		
Fall		
ADMN 570 or ADMN 575	Introduction to Financial Management or Behavior in Organizations	4
ADMN 580 or ADMN 585	Quantitative Decision Making or Marketing	4
International Business and Economics option course [2]		4
Discovery		4
PAUL 670 or PAUL 680	BiP-Analytical Intelligence Topics or BiP-Competitive & Professional Intelligence Topics	2
	Credits	**18**
Spring		
ADMN 585 or ADMN 580	Marketing or Quantitative Decision Making	4
International Business and Economics option course [2]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
PAUL 680 or PAUL 670	BiP-Competitive & Professional Intelligence Topics or BiP-Analytical Intelligence Topics	2
	Credits	**18**
Fourth Year		
Fall		
International Business and Economics option course [2]		4
International Business and Economics option course [2]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
ADMN 775 & ADMN 700	Strategic Management: Decision Making and PAUL Assessment of Core Knowledge	4
International Business and Economics option course [2]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**137**

[1] Students can explore a second option, second major, minor, or general electives.

[2] The International Business and Economics option also requires and international experience which can be satisfied through an approved study abroad or an approved internship at an international organization. Students should discuss their plan to complete the experience requirement with their advisor.

Student Learning Outcomes

Program Learning Outcomes

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Apply data-driven reasoning to business decisions using appropriate analytical approaches.

Goal 2: Communication & Collaboration, Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Goal 3: Global & Social Responsibility, Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions.

Business Administration Major: Management Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration-management

Description

The Option in Management provides students with the knowledge and skills to assess organizational effectiveness, identify challenges, develop solutions, and implement changes in order to improve internal and external performance. Courses emphasize critical thinking, problem-solving, planning, interpersonal skills related to ethical leadership in the global economy, managing innovation and technology, organizational change and sustainability, and international and cross-cultural issues in organizations.

The option emphasizes the generalist's mindset in concert with a specialist's functional understanding of the firm. This is an excellent option for students who see themselves as "big picture" people. Future career paths include an array of management, supervisory, entrepreneurial, human resources, and other positions in for-profit and non-profit organizations. The option is also recommended for students considering graduate education in management or law.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A typical plan of study follows, showing the major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted. For an individual schedule/plan of study, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

Code	Title	Credits
Required Courses		
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 403	Computing Essentials for Business	1
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4
ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ADMN 775	Strategic Management: Decision Making [1]	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics	2

[1] This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

Option in Management

Code	Title	Credits
Required Courses		**8**
Select two courses from the following:		
MGT 630	Leading in Diverse Organizations	
MGT 701	Stakeholder Engagement & Sustainable Businesses	
MGT 714	Organizational Changemaker Skills	
Management Electives [1]		**12**
Select three courses from the following:		
MGT 640	Human Resource Management	
MGT 642	Talent Acquisition	
MGT 655	Doing Business Globally	
MGT 662	Exploration in Entrepreneurial Management	
or MGT 733	Launch Ready: The Entrepreneur's Capstone	
MGT 666	Strategic Negotiation and Conflict Management	

MGT 713	Leadership Assessment and Development	
MGT 755	Managing Business and People Across Borders	
MGT 620	Topics in Management [2]	
or MGT 720	Topics in Management II	
INCO 505I	Internship: Semester in the City (Boston) or Semester for Impact (NH) [3]	
Total Credits		**20**

[1] Students may take third required course as one elective.
[2] Topics will change from year to year.

Additional Tracks in Management

Students may decide to concentrate their electives in a particular area and select one of two tracks (see below), or may combine courses from the two tracks to fulfill the MGT elective course requirement.

Code	Title	Credits
Strategic HR & Analytics Track		
Required Courses		
MGT 630	Leading in Diverse Organizations	4
MGT 640	Human Resource Management	4
MGT 714	Organizational Changemaker Skills	4
Select two courses from the following:		8
MGT 642	Talent Acquisition	
MGT 666	Strategic Negotiation and Conflict Management	
MGT 720	Topics in Management II (Leadership, Motivation & Rewards)	
Total Credits		**20**

Code	Title	Credits
Sustainable Business Track		
Required Courses		
MGT 701	Stakeholder Engagement & Sustainable Businesses	4
MGT 713	Leadership Assessment and Development	4
MGT 720	Topics in Management II (Design Thinking for Strategic Innovation)	4
Business Electives		**4**
Select one course from the following:		
MGT 662	Exploration in Entrepreneurial Management	
MGT 666	Strategic Negotiation and Conflict Management	
MGT 655	Doing Business Globally	
MGT 755	Managing Business and People Across Borders	
MKTG 620	Topics in Marketing (Sustainable & Responsive Marketing Practices)	
Sustainability Electives		**4**
Select one course from the following:		
ECON 655	Innovation in the Global Economy	
NR 507	Introduction to our Energy System and Sustainable Energy	
NR 784	Sustainable Living - Global Perspectives	
NR 785	Systems Thinking for Sustainable Solutions	
PHIL 531	Topics in Professional and Business Ethics	
SOC 565	Environment and Society	
SUST 501	Sustainability in Action	
Total Credits		**20**

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ADMN 401W or ADMN 410	Introduction to Responsible Business Management or Management Information Systems	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
ADMN 403	Computing Essentials for Business	1
Discovery		4
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401	First-Year Writing	4
Discovery		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery		4
Discovery		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ADMN 503	Managerial Accounting	4
ADMN 575	Behavior in Organizations	4
Discovery		4
Discovery		4
	Credits	**16**
Third Year		
Fall		
ADMN 585	Marketing	4
ADMN 570 or ADMN 580	Introduction to Financial Management or Quantitative Decision Making	4
Management option course		4
Discovery		4
PAUL 670 or PAUL 680	BiP-Analytical Intelligence Topics or BiP-Competitive & Professional Intelligence Topics	2
	Credits	**18**
Spring		
ADMN 580 or ADMN 570	Quantitative Decision Making or Introduction to Financial Management	4
Management option course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4

PAUL 680 or PAUL 670	BiP-Competitive & Professional Intelligence Topics or BiP-Analytical Intelligence Topics	2
	Credits	**18**
Fourth Year		
Fall		
Management option course		4
Management option course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
ADMN 775 & ADMN 700	Strategic Management: Decision Making and PAUL Assessment of Core Knowledge	4
Management option course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**137**

[1] Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.
- Apply data-driven reasoning to business decisions using appropriate analytical approaches.

Goal 2: Communication & Collaboration, Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Goal 3: Global & Social Responsibility, Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions.

Business Administration Major: Marketing Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration-marketing

Description

The Option in Marketing focuses on how to develop, establish, and maintain products and services of high value for customers as well as how to deliver and communicate them, from both digital and traditional perspectives. The option addresses key linkages critical to effective customer and brand management, from understanding customer needs and problems to delivering appropriate solutions and services. It further examines decision choices facing managers concerning market selection, entry timing, positional advantage to be pursued, targeting, and executional approaches. The option emphasizes digital marketing and analytics across its courses.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A typical plan of study follows, showing the major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted. For an individual schedule/plan of study, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

Code	Title	Credits
Required Courses		
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 403	Computing Essentials for Business	1
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4
ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ADMN 775	Strategic Management: Decision Making [1]	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics	2

[1] This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

Option in Marketing

Code	Title	Credits
Required Courses		
MKTG 752	Marketing Research	4
MKTG 753	Consumer/Buyer Behavior	4
MKTG 763	Marketing Analytics	4
MKTG 775	Marketing Workshop	4
Select two courses from the following:		8
MKTG 644	Retail Management in an Omnichannel World	
MKTG 649	Foundations of Personal Selling	
MKTG 750	Marketing Strategy	
MKTG 757	Integrated Marketing Communication	
MKTG 760	International Marketing	
MKTG 764	New Product Development	
MKTG 765	Applications in Digital Marketing	
MKTG 620	Topics in Marketing [1]	
or MKTG 720	Topics in Marketing II	
Total Credits		**24**

[1] Offerings will vary from semester to semester.

For additional courses, students are encouraged to meet with department faculty or with the Academic Advising Office for help in choosing a career track and additional courses.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ADMN 401W or ADMN 410	Introduction to Responsible Business Management or Management Information Systems	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
Discovery		4
ADMN 403	Computing Essentials for Business	1
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401	First-Year Writing	4
Discovery		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery		4
Discovery		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ADMN 503	Managerial Accounting	4
ADMN 585	Marketing	4
Discovery		4
Discovery		4
	Credits	**16**
Third Year		
Fall		
ADMN 570 or ADMN 580	Introduction to Financial Management or Quantitative Decision Making	4
ADMN 575	Behavior in Organizations	4
MKTG 752 or MKTG 753	Marketing Research or Consumer/Buyer Behavior	4
Discovery		4
PAUL 670 or PAUL 680	BiP-Analytical Intelligence Topics or BiP-Competitive & Professional Intelligence Topics	2
	Credits	**18**
Spring		
ADMN 580 or ADMN 570	Quantitative Decision Making or Introduction to Financial Management	4
MKTG 753 or MKTG 752	Consumer/Buyer Behavior or Marketing Research	4
MKTG 763	Marketing Analytics	4
Course selected in consultation with advisor [1]		4
PAUL 680 or PAUL 670	BiP-Competitive & Professional Intelligence Topics or BiP-Analytical Intelligence Topics	2
	Credits	**18**

Fourth Year		
Fall		
ADMN 775 & ADMN 700 or MKTG 775	Strategic Management: Decision Making or Marketing Workshop	4
Marketing elective		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
MKTG 775 or ADMN 775	Marketing Workshop or Strategic Management: Decision Making	4
Marketing elective		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**137**

[1] Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.
- Apply data-driven reasoning to business decisions using appropriate analytical approaches.

Goal 2: Communication & Collaboration, Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Goal 3: Global & Social Responsibility, Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions.

Business Administration Major: Student Designed Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration-student-designed

Description

A Student-Designed Option (SDO) in Business Administration is for highly motivated and disciplined students to pursue a course of study that is not available through any of the other current options in Paul College. The SDO should be different from any of the existing options and should serve to further the students' intellectual development and future career goals.

The SDO cannot be used to avoid portions of existing options that are presumed to be uninteresting or difficult. For example, the SDO cannot consist of all courses from an existing option with one or two substitutions. The SDO will consist of courses from Paul College, and courses from outside of Paul College from existing disciplines (e.g., Psychology, Art, Homeland Security, etc.).

Students should begin planning for their designed major in their sophomore year by finding a faculty advisor and work with them to draft the proposal. All proposals should be submitted by the fall of the student's junior year.

If you are considering this option you should begin your proposal no later than the second semester of your sophomore year. The formal application deadline is Oct. 15 of your Junior year. To be eligible you must have a cumulative grade point average of at least 3.0.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A typical plan of study follows, showing the major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted. For an individual schedule/plan of study, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

Code	Title	Credits
Required Courses		
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 403	Computing Essentials for Business	1
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4

ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ADMN 775	Strategic Management: Decision Making [1]	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics	2

[1] This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

Student-Designed Option

Code	Title	Credits
Student Designed Option (SDO) Requirements		**20**
Students will work with a faculty advisor to draft a proposal to be submitted to the Undegraduate Curriculum Committee. Proposals must be submitted by fall of Junior Year. The option must consist of at least 5 courses and include: [1]		
At least two (2) courses from ACC, DS, FIN, MGT, or MKTG departments that meet approval		
At least two (2) other courses from outside of Paul College		
One (1) Additional Course chosen in consultation with your faculty advisor.		

[1] Students interested in the Student Designed Option must meet with their advisor to discuss their interest and obtain the proposal application.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ADMN 401W or ADMN 410	Introduction to Responsible Business Management or Management Information Systems	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
ADMN 403	Computing Essentials for Business	1
Discovery		4
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401	First-Year Writing	4
Discovery		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery		4
Discovery		4
	Credits	**16**
Spring		
ADMN 503	Managerial Accounting	4
ADMN Course selected in consultation with advisor		4
Discovery		4
Discovery		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Third Year		
Fall		
ADMN Course selected in consultation with advisor		4
ADMN Course selected in consultation with advisor		4
Student Designed option course		4
Discovery		4
PAUL 670 or PAUL 680	BiP-Analytical Intelligence Topics or BiP-Competitive & Professional Intelligence Topics	2
	Credits	**18**
Spring		
ADMN Course selected in consultation with advisor		4
Student Designed option course		4
Student Designed option course		4
Course seleted in consultation with advisor [1]		4
PAUL 680 or PAUL 670	BiP-Competitive & Professional Intelligence Topics or BiP-Analytical Intelligence Topics	2
	Credits	**18**
Fourth Year		
Fall		
Student Designed option course		4
Student Designed option course		4
Course seleted in consultation with advisor [1]		4
Course seleted in consultation with advisor [1]		4
	Credits	**16**

Spring		
ADMN 775 & ADMN 700	Strategic Management: Decision Making and PAUL Assessment of Core Knowledge	4
Student Designed option course		4
Course seleted in consultation with advisor [1]		4
Course seleted in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**137**

[1] Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.
- Apply data-driven reasoning to business decisions using appropriate analytical approaches.

Goal 2: Communication & Collaboration, Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Goal 3: Global & Social Responsibility, Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions.

Business Administration Major: Supply Chain Management Option (B.S.)

https://www.unh.edu/program/bachelor-science/business-administration-supply-chain-management

Description

The Supply Chain Management (SCM) Option is designed for students eager to leverage data analytics and sustainable practices to optimize the flow of goods and services in global markets. Recognizing the pivotal role of supply chains in today's business landscape, the SCM Option equips future leaders with the skills needed to tackle operational challenges and formulate strategic solutions. SCM students will be well-prepared to navigate diverse industries, equipped with an understanding of essential supply chain functions such as planning, forecasting, procurement, logistics, distribution, and price optimization. Graduates will be ready to drive innovation and deliver impactful solutions to real-world business challenges.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

A typical plan of study follows, showing the major-required courses. Students take 16-18 credits per semester. Discovery Program requirements (including the Inquiry requirement in the first two years) and elective courses are taken as well. Students are expected to follow this course plan. In the first three semesters, students cannot take more than two major courses in a single semester. The options have additional requirements as noted. For an individual schedule/plan of study, students should check with the Paul College Undergraduate Programs and Advising Office for specific recommendations.

Code	Title	Credits
Required Courses		
ADMN 401W	Introduction to Responsible Business Management	4
ADMN 403	Computing Essentials for Business	1
ADMN 410	Management Information Systems	4
ADMN 502	Financial Accounting	4
ADMN 503	Managerial Accounting	4
ADMN 510	Business Analytics and Statistics	4
ADMN 570	Introduction to Financial Management	4
ADMN 575	Behavior in Organizations	4
ADMN 580	Quantitative Decision Making	4
ADMN 585	Marketing	4
ADMN 775	Strategic Management: Decision Making [1]	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
PAUL 680	BiP-Competitive & Professional Intelligence Topics	2

Depending of the choice of option and the specific requirements thereof, students may be able to take PAUL or non-PAUL electives in their junior or senior year.

Code	Title	Credits
Option in Supply Chain Management		
Required courses:		
SC 680	Global Supply Chain Management	4
SC 671	Supply Chain Analytics	4
SC 775	Supply Chain Management Project Experience	4-8
or SC 770W	Supply Chain Management External Experience	
Analytics Electives [2]		

Select one of the following:	
FIN 703	International Financial Management
MKTG 763	Marketing Analytics
ECON 652	Economics of Artificial Intelligence
DS 772	Predictive Analytics and Modeling
DS 673	Database Management
ACC 620	Topics in Accounting
Process Electives [2]	
Select one of the following:	
MGT 755	Managing Business and People Across Borders
MGT 666	Strategic Negotiation and Conflict Management
MKTG 764	New Product Development
MKTG 644	Retail Management in an Omnichannel World
DS 774	AI and Emerging Technologies in Business

1 This is the capstone course in the business administration program, and satisfies the capstone requirement of the Discovery Program. Students may be required to concurrently enroll in ADMN 700 PAUL Assessment of Core Knowledge (zero credits) for AACSB accreditation purposes.

2 Only one course can overlap between two Business Administration Options.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ADMN 401W or ADMN 410	Introduction to Responsible Business Management or Management Information Systems	4
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
ADMN 403	Computing Essentials for Business	1
Discovery		4
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ADMN 410 or ADMN 401W	Management Information Systems or Introduction to Responsible Business Management	4
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401	First-Year Writing	4
Discovery		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ADMN 502	Financial Accounting	4
ADMN 510	Business Analytics and Statistics	4
Discovery		4
Discovery		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ADMN 503	Managerial Accounting	4
ADMN 580	Quantitative Decision Making	4
Discovery		4
Discovery		4
	Credits	**16**
Third Year		
Fall		
ADMN 570	Introduction to Financial Management	4
ADMN 575 or ADMN 585	Behavior in Organizations or Marketing	4
SC 680	Global Supply Chain Management	4
Discovery		4
PAUL 670 or PAUL 680	BiP-Analytical Intelligence Topics or BiP-Competitive & Professional Intelligence Topics	2
	Credits	**18**
Spring		
ADMN 585 or ADMN 575	Marketing or Behavior in Organizations	4
SC 671	Supply Chain Analytics	4
Supply Chain option course		4
Course selected in consultation with advisor [1]		4
PAUL 680 or PAUL 670	BiP-Competitive & Professional Intelligence Topics or BiP-Analytical Intelligence Topics	2
	Credits	**18**
Fourth Year		
Fall		
ADMN 775 & ADMN 700	Strategic Management: Decision Making and PAUL Assessment of Core Knowledge	4
Supply Chain option course or SC 770W		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
SC 775	Supply Chain Management Project Experience	4
Supply Chain option course		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**137**

1 Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

Goal 1: Business Concepts & Analytical Reasoning, Graduates will apply core business knowledge and critical thinking to address organizational challenges and opportunities.

- Analyze organizational challenges and opportunities using core business concepts.
- Apply data-driven reasoning to business decisions using appropriate analytical approaches.

Goal 2: Communication & Collaboration, Graduates will communicate effective and work productively in teams.

- Communicate original thoughts clearly and professionally in written and oral formats.
- Contribute effectively to teams, demonstrating individual and collaborative accountability.

Goal 3: Global & Social Responsibility, Graduates will demonstrate integrity and responsibility in ethical, social and global business contexts.

- Evaluate ethical and social responsibility issues and recommend actions from multiple stakeholder perspectives.
- Analyze how global and cultural factors shape responsible business decisions.

Business Administration Minor

https://www.unh.edu/program/minor/business-administration

Description

The Minor in Business Administration offers students majoring in other disciplines the opportunity to develop a well-rounded business background. Students complete coursework in core business areas such as accounting, marketing, management, as well as economics. The minor enables students to enter their selected industries with skills and experience that distinguish them as professionals.

Requirements

Academic policies related to Minors.

- The Business Administration minor consists of completing five courses (20 credits) with a grade of C- or better and a 2.0 grade-point average.
- The following courses only count toward minor requirements and do not carry credit toward Paul College major requirements: ACC 501 , MKTG 530 , and MGT 535

Code	Title	Credits
Required Courses		
ECON 402	Principles of Economics (Micro)	4
ACC 501	Survey of Accounting	4
or ADMN 502	Financial Accounting	
MKTG 530	Survey of Marketing	4
or ADMN 585	Marketing	
MGT 535	Organizational Behavior	4
or ADMN 575	Behavior in Organizations	
Elective		
Select one course from the folllowing:		4
ADMN 510	Business Analytics and Statistics	
ADMN 503	Managerial Accounting	
DS 520	Topics in Entrepreneurship/Decision Sciences	
or DS 620	Topics in Decision Sciences	
ECON 401	Principles of Economics (Macro)	
ECON 625	Economic History of the United States	
ECON 620	Topics in Economics	
or ECON 720	Economic Problems	
FIN 620	Topics in Finance I	
MGT 620	Topics in Management	
MGT 640	Human Resource Management	
MGT 642	Talent Acquisition	
MGT 666	Strategic Negotiation and Conflict Management	
MKTG 520	Topics in Marketing	
or MKTG 620	Topics in Marketing	
MKTG 547	Promotion and Advertising	
MKTG 649	Foundations of Personal Selling	
PAUL 450	Personal Finance	
*Other courses may be approved by petition		
Total Credits		**20**

Pre-Business Path (B.S.)

https://paulcollege.unh.edu/admissions/path-paul-pre-business-program

Description

Path to Paul is a one semester (fall only) pre-business program for academically promising students who don't meet the minimum academic requirements for direct admission to a Paul College of Business and Economics major. Entering first year prospective students who apply to Paul College and are not eligible for direct admission will automatically be considered on a space available basis. To be eligible, students must have a minimum 3.2 high school GPA.

Once enrolled in the pre-business path program, students complete five courses in math, economics, and two discovery program courses, as well as enroll in the Freshman Academic Experience. Upon successful completion of this first semester program with a minimum 2.3 cumulative GPA students can then officially declare a Paul College major.

Requirements

- **Program Length**: one semester (17 credits); upon successful completion, students declare a Paul College major.
- **Major:** students enter as a pre-business major.
- Minimum 2.3 cumulative GPA required.

Code	Title	Credits
Required Courses		
MATH 417	Precalculus for Business and Life Sciences	4
or MATH 422	Mathematics for Business Applications	
ECON 401	Principles of Economics (Macro) [1]	4
or ECON 402	Principles of Economics (Micro)	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
Discovery Program Courses		
Select two Discovery Program Courses		8
Total Credits		**17**

[1] ECON 401 or ECON 402 must be completed with a C- or better.

EcoGastronomy

Programs

- EcoGastronomy (Dual Major) (p. 411)

Economics (ECON)

Economics is the study of how societies organize themselves to produce goods and services and to distribute those products among the members of society. In the modern world, a combination of market forces, public policies, and social customs perform these basic economic tasks. Economists use concepts, models, and data to analyze efficiency of resource use, fairness of economic outcomes, and development of global and national economies. The economics programs are designed to introduce students to the tools of economic analysis and to show students how they can use those tools to analyze and better understand real-world situations.

Undergraduate training in economics is an excellent background for a variety of careers, including banking and financial services, journalism, international business, public service, the diplomatic corps, entrepreneurial ventures, and government administration. An undergraduate major in economics is also excellent preparation for those interested in graduate work in law, business administration, and international relations.

The department offers the choice of a B.A. degree in economics or a B.S. degree in analytical economics.The B.A. degree is designed to offer students maximum flexibility in designing a program of study. Students are encouraged to take a wide variety of courses, double major, and take advantage of study abroad programs. The B.S. degree differs from the B.A. degree in that it requires more quantitative and data analysis courses but does not require a foreign language. It provides more structure and direction than the B.A. degree and is more technically focused. Please see Economics programs for further information.

Courses in economics are open to non-majors on a space-available basis. An economics minor is also available, as students majoring in other programs have found that certain economics courses are useful supplements to their own majors and a help in gaining employment.

https://paulcollege.unh.edu/economics

Programs

- Analytical Economics Major (B.S.) (p. 723)
- Economics Major (B.A.) (p. 725)
- Economics Major: Public Policy and Sustainability Option (B.A.) (p. 726)
- Economics Minor (p. 728)

Faculty

Economics Department Faculty

Analytical Economics Major (B.S.)

https://www.unh.edu/program/bachelor-science/analytical-economics

Description

B.S. in Analytical Economics emphasizes the predictive and prescriptive modeling skills that are in high demand in today's labor market. Predictive modeling draws on econometrics and machine learning to uncover patterns in data, estimate causal relationships, and forecast economic and business outcomes. Prescriptive modeling builds on economic theory and quantitative methods to evaluate tradeoffs, optimize strategic decisions, and design effective policy or business strategies. Together, these analytical tools prepare students to translate data and theory into actionable insight for firms, governments, and nonprofit organizations.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

- B.S. analytical economics majors must complete eleven courses in economics with a grade of at least a C- (1.67) in each Paul College major course and an average grade of 2.3 or better in the major courses.
- In addition, majors must complete MATH 424A and ADMN 403, ADMN 410, and ADMN 510.
- ECON 775 is the capstone course for the B.S. major and satisfies the capstone requirement of the University Discovery Program.

Code	Title	Credits
Required Courses		
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
ECON 501	Business and Economic History	4
ADMN 403	Computing Essentials for Business	1
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
MATH 424A	Calculus for Social Sciences	4
ADMN 410	Management Information Systems	4
ADMN 510	Business Analytics and Statistics	4
ECON 565	Predictive Modeling: Data Driven Economic Analysis	4
ECON 606	Intermediate Microeconomics with Calculus [1]	4
ECON 611	Intermediate Macroeconomic Analysis [1]	4
ECON 726	Introduction to Econometrics	4
ECON 727	Advanced Econometrics [2]	4
Capstone		
ECON 775	Applied Research Skills for Economists [3]	4
Economics Electives		
Select at least two (2) Economics electives from the following:		8
ECON 625	Economic History of the United States	
ECON 635	Money and Banking	
ECON 645	International Economics	

ECON 652	Economics of Artificial Intelligence	
ECON 653	Law and Economics	
ECON 654	Industrial Economics and Business Innovation	
ECON 655	Innovation in the Global Economy	
ECON 656	Labor Economics	
ECON 676	Economics of Sports	
ECON 704	Economics of Health	
ECON 706	Economics of Climate Change	
ECON 760	Game Theory	
ECON 765	Machine Learning for Economics	
ECON 620	Topics in Economics	
ECON 620W	Topics in Economics	
ECON 720	Economic Problems	
ECON 720W	Economic Problems	
Total Credits		**61**

[1] Major credit toward ECON 606 Intermediate Microeconomics with Calculus and/or ECON 611 Intermediate Macroeconomic Analysis will be awarded to transfer students only if equivalent courses have been taken at the upper level. Transfer students must take at least five of their economics courses at UNH. All economics-related courses taken at other institutions must be approved by the economics department in order for them to count toward the major.

[2] Or other Department approved quantitative course

[3] ECON 775 Applied Research Skills for Economists is the capstone course for the B.S. major and satisfies the capstone requirement of the University Discovery Program.

Additional Information

- Students may petition to substitute one business administration course for an economics elective if the course is at the 600 level or above and if a grade of C- or better is earned.
- Students may earn no more than 16 credits in internships, independent studies, field experience, and supervised student teaching experience.
- All Analytical Economics majors must satisfy the bachelor of science degree requirements, and all Discovery Program requirements.
- Students satisfy the Inquiry requirement of the Discovery Program before the end of their sophomore year by completing an Inquiry or Inquiry-attribute course within the Paul College, or another course offered by another college at the University.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
ADMN 403	Computing Essentials for Business	1
ADMN 410	Management Information Systems	4
ECON 501 or ENGL 401	Business and Economic History or First-Year Writing	4
MATH 424A	Calculus for Social Sciences	4
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
	Credits	**18**
Spring		
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ENGL 401 or ECON 501	First-Year Writing or Business and Economic History	4
Discovery Course		4
Discovery Course		4
PAUL 406	First-Year Innovation and Research Experience II	1
	Credits	**17**
Second Year		
Fall		
ECON 606	Intermediate Microeconomics with Calculus	4
ADMN 510	Business Analytics and Statistics	4
Discovery Course		4
Discovery Course		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ECON 611	Intermediate Macroeconomic Analysis	4
ECON 565	Predictive Modeling: Data Driven Economic Analysis	4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
ECON 726	Introduction to Econometrics	4
Economics Elective		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
ECON 727	Advanced Econometrics	4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Fourth Year		
Fall		
Economics Elective		4
Course selected in consulation with advisor [1]		4
Course selected in consulation with advisor [1]		4
Course selected in consulation with advisor [1]		4
	Credits	**16**
Spring		
ECON 775	Applied Research Skills for Economists	4
Course selected in consultation with advisor [1]		4

Course selected in consultation with advisor [1]	4
Course selected in consultation with advisor [1]	4
Credits	**16**
Total Credits	**133**

[1] Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

- Students have core proficiency in microeconomics. They understand key concepts including opportunity cost, marginal analysis, voluntary exchange, diminishing marginal returns, equilibrium and market structure.
- Students have core proficiency in macroeconomics. They understand key concepts including GDP, inflation, interest rates, business cycles, exchange rates, financial institutions and fiscal and monetary policy.
- Students have strong oral communication skills. This includes fundamental skills in preparing and delivering presentations, as well as being able to explain technical material clearly and concisely.
- Students are able to apply a statistical model to an economic question and interpret the results.
- Students are proficient in applying a programming language to statistical analysis.

Economics Major (B.A.)

https://www.unh.edu/program/bachelor-arts/economics

Description

Bachelor of Arts in Economics emphasizes economic reasoning, data literacy, and versatile communication skills. Upper-level courses apply economic analysis to business and policy problems, integrate substantive data work, and include a significant oral or written communication component. The curriculum offers students exceptional flexibility in designing their programs of study and provides a solid foundation for a wide range of careers. Students are encouraged to participate in interdisciplinary work, double majors, and study abroad programs. Economics majors may choose to focus their electives to fulfill the requirements of the Public Policy and Sustainability option.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

B.A. economics majors must complete eleven courses in economics plus ADMN 510 with a grade of at least C- (1.67) in each Paul College major course and an average grade of 2.0 or better in major courses.

Code	Title	Credits
Required Courses		
ADMN 403	Computing Essentials for Business	1
ADMN 510	Business Analytics and Statistics	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
ECON 501	Business and Economic History	4
ECON 565	Predictive Modeling: Data Driven Economic Analysis	4
ECON 605	Intermediate Microeconomic Analysis	4
or ECON 606	Intermediate Microeconomics with Calculus	
ECON 611	Intermediate Macroeconomic Analysis	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
Capstone		
ECON 774	Senior Economics Seminar [1]	4
Economics Electives		
Select four (4) courses from the following: [2]		16
ECON 625	Economic History of the United States	
ECON 635	Money and Banking	
ECON 645	International Economics	
ECON 652	Economics of Artificial Intelligence	
ECON 653	Law and Economics	
ECON 654	Industrial Economics and Business Innovation	
ECON 655	Innovation in the Global Economy	
ECON 656	Labor Economics	
ECON 704	Economics of Health	
ECON 706	Economics of Climate Change	
ECON 726	Introduction to Econometrics	
ECON 727	Advanced Econometrics	
ECON 760	Game Theory	
ECON 765	Machine Learning for Economics	
ECON 620	Topics in Economics	
ECON 620W	Topics in Economics	
ECON 720	Economic Problems	
ECON 720W	Economic Problems	
Total Credits		**59**

[1] ECON 774 Senior Economics Seminar is the capstone course for the B.A. major and satisfies the capstone requirement of the University Discovery Program.

[2] Other elective courses by approval.

Additional Information

Coursework in accounting and econometrics is recommended but not required. B.A. economics majors may choose to focus their major electives to satisfy the requirements of the option in Public Policy and Sustainability.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ECON 501	Business and Economic History	4
ENGL 401	First-Year Writing	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
ADMN 403	Computing Essentials for Business	1
	Credits	**18**
Spring		
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
PAUL 406	First-Year Innovation and Research Experience II	1
Discovery		4
Discovery		4
Discovery		4
	Credits	**17**
Second Year		
Fall		
ECON 611	Intermediate Macroeconomic Analysis	4
ADMN 510	Business Analytics and Statistics	4
Foreign Language		4
Discovery		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ECON 605	Intermediate Microeconomic Analysis	4
Foriegn Language		4
Discovery		4
Discovery		4
	Credits	**16**
Third Year		
Fall		
ECON 565	Predictive Modeling: Data Driven Economic Analysis	4
Economics Elective		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
Economics Elective		4
Economics Elective		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Fourth Year		
Fall		
ECON 774	Senior Economics Seminar	4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
Economics Elective		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**133**

[1] Students can explore a second option, second major, minor, or general electives.

Student Learning Outcomes

Program Learning Outcomes

- Students have core proficiency in microeconomics. They understand key concepts including opportunity cost, marginal analysis, voluntary exchange, diminishing marginal returns, equilibrium and market structure.
- Students have core proficiency in macroeconomics. They understand key concepts including GDP, inflation, interest rates, business cycles, exchange rates, financial institutions and fiscal and monetary policy.
- Students have strong oral communication skills. This includes fundamental skills in preparing and delivering presentations, as well as being able to explain technical material clearly and concisely.
- Students are able to use economic models to understand real-world issues relevant to business, public policy and society.
- Students are able to communicate economic concepts clearly in writing. This involves having strong fundamental writing skills as well as being able to explain technical material clearly and concisely.

Economics Major: Public Policy and Sustainability Option (B.A.)

https://www.unh.edu/program/bachelor-arts/economics-public-policy-sustainability

Description

The Option in Public Policy and Sustainability (B.A. degree) examines the factors that influence economic, social, and environmental outcomes, such as unemployment, poverty, economic inequality, health disparities, technological innovation, and pollution. Students will develop the institutional knowledge and theoretical perspective to understand the impact that decisions of individuals, firms, communities, and

governments have on such outcomes. Students will analyze the impact of specific government policies and potential reforms, theoretically and empirically.

This option is designed for students seeking careers in policy analysis and research positions at government agencies; think tanks such as RAND Corporation, Urban Institute, and Mathematica Policy Research; consulting firms such as Abt Associates; and non-governmental organizations.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: Yes

All Major, Option and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Major Requirements

Economics majors must complete eleven courses in economics plus ADMN 510 with a grade of at least C- (1.67) in each Paul College major course and an average grade of 2.0 or better in major courses.

B.A. economics majors may choose to focus their major electives to satisfy the requirements of the option.

Code	Title	Credits
Required Courses		
ADMN 403	Computing Essentials for Business	1
ADMN 510	Business Analytics and Statistics	4
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
ECON 501	Business and Economic History	4
ECON 565	Predictive Modeling: Data Driven Economic Analysis	4
ECON 605	Intermediate Microeconomic Analysis	4
or ECON 606	Intermediate Microeconomics with Calculus	
ECON 611	Intermediate Macroeconomic Analysis	4
MATH 422	Mathematics for Business Applications	4
or MATH 424A	Calculus for Social Sciences	
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
PAUL 406	First-Year Innovation and Research Experience II	1
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
PAUL 670	BiP-Analytical Intelligence Topics	2
Capstone		
ECON 774	Senior Economics Seminar [1]	4
Economics Electives		
Select four (4) courses from the following: [2]		16
ECON 625	Economic History of the United States	
ECON 635	Money and Banking	
ECON 645	International Economics	
ECON 652	Economics of Artificial Intelligence	
ECON 653	Law and Economics	
ECON 654	Industrial Economics and Business Innovation	
ECON 655	Innovation in the Global Economy	
ECON 656	Labor Economics	
ECON 704	Economics of Health	
ECON 706	Economics of Climate Change	
ECON 726	Introduction to Econometrics	
ECON 727	Advanced Econometrics	
ECON 760	Game Theory	
ECON 765	Machine Learning for Economics	
ECON 620	Topics in Economics	
ECON 620W	Topics in Economics	
ECON 720	Economic Problems	
ECON 720W	Economic Problems	
Total Credits		**59**

Code	Title	Credits
Public Policy and Sustainability Option Requirements		
Select a minimum of two courses from the following:		8
ECON 653	Law and Economics	
ECON 656	Labor Economics	
ECON 704	Economics of Health	
ECON 706	Economics of Climate Change	
Final course select from list of required courses above or from one of the approved courses below:		
ECON 654	Industrial Economics and Business Innovation	
ECON 620	Topics in Economics (Must be Public Economics Topics)	
NR 572	Introduction to Natural Resource Economics [3]	
NR 606	International Energy Topics [3]	
NR 708W	Environmental Economics [3]	
HMP 746	Health Policy [3]	
SUST 501	Sustainability in Action [3]	
Approval required by petition to the Economics Department for other 600-level or 700-level ECON course, including ECON 620: Public Economics.		
Total Credits		**8**

1. Course satisfies the capstone requirement of the University Discovery Program.
2. Other elective course by approval.
3. Satisfies requirement of the option, but does not count toward the four-elective requirement of the Economics B.A degree.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
ECON 501	Business and Economic History	4
ENGL 401	First-Year Writing	4
MATH 422 or MATH 424A	Mathematics for Business Applications or Calculus for Social Sciences	4
PAUL 405	FIRE: First-Year Innovation and Research Experience I	1
ADMN 403	Computing Essentials for Business	1
	Credits	**18**
Spring		
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
PAUL 406	First-Year Innovation and Research Experience II	1
Discovery Course		4

Discovery Course		4
Discovery Course		4
	Credits	**17**
Second Year		
Fall		
ECON 611	Intermediate Macroeconomic Analysis	4
ADMN 510	Business Analytics and Statistics	4
Foreign Language		4
Discovery Course		4
PAUL 505	FOCUS: Finding Opportunities, Careers, and University Success	2
	Credits	**18**
Spring		
ECON 605	Intermediate Microeconomic Analysis	4
Foriegn Language		4
Discovery Course		4
Discovery Course		4
	Credits	**16**
Third Year		
Fall		
ECON 565	Predictive Modeling: Data Driven Economic Analysis	4
Economics Elective [2]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
Economics Elective [2]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Fourth Year		
Fall		
Economics Elective [2]		4
Economics Elective		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
Spring		
ECON 774	Senior Economics Seminar	4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
Course selected in consultation with advisor [1]		4
	Credits	**16**
	Total Credits	**133**

1. Students can explore a second option, second major, minor, or general electives.
2. Students can use three ECON elective courses to satisfy both the Public Policy and Sustainability option and the Economics Elective requirement for the core major required courses.

Student Learning Outcomes

Program Learning Outcomes

- Students have core proficiency in microeconomics. They understand key concepts including opportunity cost, marginal analysis, voluntary exchange, diminishing marginal returns, equilibrium and market structure.
- Students have core proficiency in macroeconomics. They understand key concepts including GDP, inflation, interest rates, business cycles, exchange rates, financial institutions and fiscal and monetary policy.
- Students have strong oral communication skills. This includes fundamental skills in preparing and delivering presentations, as well as being able to explain technical material clearly and concisely.
- Students are able to use economic models to understand real-world issues relevant to business, public policy and society.
- Students are able to communicate economic concepts clearly in writing. This involves having strong fundamental writing skills as well as being able to explain technical material clearly and concisely.

Economics Minor

https://www.unh.edu/program/minor/economics

Description

Students pursuing a minor in Economics acquire the analytical tools needed to analyze how individuals and firms make decisions and how their interactions shape market outcomes. Students develop skills in economic reasoning, data interpretation, and critical thinking that complement majors across the social sciences, business, and liberal arts. For business students, the minor provides a deeper understanding of foundational issues such as incentives, market behavior, and agency concerns. For liberal arts majors, it offers a framework for evaluating public policy and social outcomes. The Economics minor enhances preparation for careers in business, government, consulting, and nonprofit work, as well as for graduate study in law, business, and public policy.

Requirements

Academic policies related to Minors.

- The minor in economics consists of completing five courses (20 credits).
- A minimum of three courses must be taken at UNH.
- All transfer courses must be evaluated for equivalency.

Code	Title	Credits
Required Courses		
ECON 401	Principles of Economics (Macro) [2]	4
ECON 402	Principles of Economics (Micro) [2]	4
Select one course from the following:		4
ECON 605	Intermediate Microeconomic Analysis [1]	
or ECON 606	Intermediate Microeconomics with Calculus	
ECON 611	Intermediate Macroeconomic Analysis [1]	
ECON 635	Money and Banking [1]	
Electives		
Select two courses from the following:		8
ECON 565	Predictive Modeling: Data Driven Economic Analysis	
ECON 605	Intermediate Microeconomic Analysis [1]	
or ECON 606	Intermediate Microeconomics with Calculus	

ECON 611	Intermediate Macroeconomic Analysis [1]	
ECON 620	Topics in Economics	
ECON 620W	Topics in Economics	
ECON 625	Economic History of the United States	
ECON 635	Money and Banking [1]	
ECON 645	International Economics	
ECON 653	Law and Economics	
ECON 652	Economics of Artificial Intelligence	
ECON 654	Industrial Economics and Business Innovation	
ECON 655	Innovation in the Global Economy	
ECON 656	Labor Economics	
ECON 676	Economics of Sports	
ECON 706	Economics of Climate Change	
ECON 726	Introduction to Econometrics	
ECON 727	Advanced Econometrics	
ECON 760	Game Theory	
ECON 720	Economic Problems	
ECON 720W	Economic Problems	
ECON 765	Machine Learning for Economics	
Any 600 or 700 level ECON course [3]		
Total Credits		**20**

1 ECON 605, ECON 611, ECON 635, may only be applied towards the minor requirements once.

2 Note that many of the elective courses have ECON 401 and ECON 402 as prerequisites.

3 ECON 501 Business and Economic History cannot be used toward the minor.

Entrepreneurship

- Entrepreneurship Minor (p. 729)

Entrepreneurship Minor

https://www.unh.edu/program/minor/entrepreneurship

Description

The Minor in Entrepreneurship in the Peter T. Paul College of Business and Economics is for non-business majors. The minor provides non-business students with concepts, tools and techniques to become creative thinkers, conceptualize and articulate problem statements, construct innovative solutions, and explore and seek opportunities. The focus of the minor is not about creating startups, although this may be an ancillary outcome, rather on entrepreneurial thinking that make the students engage in successful careers in their respective disciplines.

The minor consists of required courses offered by Paul College and two courses from a selective list offered by other UNH Colleges. The Paul courses are designed to follow a proscribed sequence that take the student through the entrepreneurial process.

Requirements

Academic policies related to Minors.

Code	Title	Credits
Required Courses		
MGT 520	Topics in Management (Thinking like an Entrepreneur)	4
MKTG 520	Topics in Marketing (Understanding Your Customer)	4
DS 520	Topics in Entrepreneurship/Decision Sciences (Realizing the Entrepreneurial Dream)	4
Select two courses from the following:		8
HIST 522	Science in the Modern World	
HMP 721	Managing Health Care Organizations	
HMP 722	Health Care Management II	
RMP 775	Entrepreneurial and Commercial Recreation	
TECH 750	Intellectual Asset Management for Engineers and Scientists	
*For other course options contact the Associate Dean for Undergraduate Education		
Total Credits		**20**

Please note:

- The remaining two courses can be from Paul College or the student's home college, depending on suitability and availability of the courses as well as a student's interest to specialize in a specific area within the Minor, and subject to approval – please contact Undergraduate Programs and Advising Office to discuss approval process.
- Some of the listed courses are "special topics" (or equivalent). Please make sure that the course has the same title (not simply the same number) as the listed course in order for it to count for the minor.
- The Entrepreneurship Minor also follows UNH policy for minors

Hospitality Management (HMGT)

The hospitality management program at UNH provides a world-class education, personal attention and support, and real-world and international experience, setting students apart from the competition and ensuring they are well prepared for a successful and meaningful career.

The hospitality management program develops graduates to be senior executives. This is accomplished through personal attention and support, training on cutting-edge industry-specific software and technology, career development, mentoring and placement, and the network connection of seasoned alumni in top industry positions. Graduates have accepted management positions in lodging and resorts, food service beverage, event planning and design, software companies, tourism, travel and recreation, among the many potential opportunities.

An important aspect of the program is the required professional development, which includes practical work experiences, career development, mentoring, and placement, preparing students to be more competitive in the job market and for a successful and rewarding career. Employers look for individuals with relevant industry experience, and this is provided through the required 400 hours of an approved work experience.

The hotel and hospitality management program offers a wide range of international education options to study abroad. We have partnered with business schools in countries such as Spain, Australia, Croatia, United Kingdom, and Italy.

https://paulcollege.unh.edu/hospitality-management

Programs

- Hospitality and Services Management Minor (p. 730)

Faculty

Hospitality Management Department Faculty

Hospitality and Services Management Minor

https://www.unh.edu/program/minor/hospitality-services-management

Description

Hospitality and Services Management Minor is offered as a professional educational opportunity for students as an entree to the world's largest industry, hospitality and tourism. Students pursuing the minor will have opportunities to interview with major hospitality companies for staff and management training positions. In addition, students will be better able to secure meaningful working experiences in the industry during their college career as they progress towards the minor.

The required courses have been selected to ensure all students have a well-rounded learning experience that will strengthen their ability to succeed.

Requirements

Academic policies related to Minors.

The minor consists of completing five courses (20 credits) and is comprised of three required and two elective courses.

- The following courses MKTG 530 and ACC 501 count toward the minor only and do not carry credit toward Paul College majors.

Code	Title	Credits
Required Courses		
HMGT 405	Introduction to Food and Service Management [1]	4
HMGT 601	Management of Customer Services and Experiences	4
HMGT 681	Contemporary Resort Development and Management	4
Electives		
Select two courses from the following:		8
HMGT 570	International Food and Culture	
HMGT 635	Leadership and HR Management in Hospitality and Tourism	
HMGT 661	Event Design, Planning, and Management	
HMGT 667	Advanced Food & Beverage Operations & Event Management (by permission only)	
HMGT 771	International Wine and Beverage	
HMGT 777	Casino Management	
HMGT 798	Topics	
ECOG 401	Introduction to Ecogastronomy	
ACC 501	Survey of Accounting	
or ADMN 502	Financial Accounting	
MKTG 530	Survey of Marketing	
or ADMN 585	Marketing	
Total Credits		**20**

[1] **Practicum Requirement:** Students completing the minor will work at one of the Gourmet Dinner weekends. This will typically be completed during the semester HMGT 405 is taken.

Sales

- Sales Minor (p. 730)

Sales Minor

https://www.unh.edu/program/minor/sales

Description

Minor in Sales – The modern sales professional helps customers solve business problems through active listening, insightful questions, deep empathy, domain competency, and the understanding and communicating of value. The Sales Minor will prepare you to start your career journey into sales by teaching you to sell yourself first and giving you the skills and experience to succeed in your first role. More college graduates will go into sales than any other profession. Why not be prepared and differentiate yourself for the best opportunities by earning a sales minor and developing skills that are transferrable to any profession.

Requirements

Academic policies related to Minors.

The Minor in Sales is open to both Paul College and Non-Paul College students. Please reference the required courses depending on college. The minor consists of three required courses (marketing, sales level-one, sales level-two), two elective courses, and one sales experience. Please contact the Paul College Undergraduate Advising and Programs Office for an up-to-date list of approved elective courses or sales experiences.

- Students are responsible for checking pre-requisites for all courses listed
- All transfer courses must be evaluated for equivalency
- No more than 2 transfer courses may be applied to the minor
- Capacity in courses may be limited
- Some of the listed courses are "special topics" (or equivalent). Please make sure that the course has the same title (not simply the same number) as the listed course in order for it to count for the minor.
- The Sales Minor also follows UNH policy for minors

Code	Title	Credits
Required Courses		
ADMN 585	Marketing	4
or MKTG 530	Survey of Marketing	
MKTG 649	Foundations of Personal Selling	4
MKTG 689	Advanced Sales	4
Sales Experience [1]		
Select one of the following:		
MKTG 650	Professional Sales Group	
or qualifying sales internship		
Electives		
Select two courses from the approved electives list below		8
Total Credits		**20**

[1] **One Required Sales Experience**: MKTG 650 Professional Sales Group minimum of two semesters of the 2-credit course, PAUL 795 Internship or internship experience approved by Director, Sales Center.

Code	Title	Credits
Approved Elective Courses		
Select two courses from the following:		
ADMN 575	Behavior in Organizations	
or MGT 535	Organizational Behavior	
CMN 457	Introduction to Language and Social Interaction	
CMN 500	Public Speaking	
CMN 504	Introduction to Argumentation	
CMN 588	Analyzing Institutional Interaction	
CS 408	Living in a Networked World: The Good, the Bad, and the Ugly	
CMN 788	Opening Everyday Interaction	

ECON 605	Intermediate Microeconomic Analysis
ENGL 502	Professional and Technical Writing
ENGL 503	Persuasive Writing
ENGL 602	Advanced Professional and Technical Writing
HMGT 758	Revenue Management: The Art of Pricing
HMP 740	Health Care Financial Management
HMP 741	Health Care Financial Management II
IT 403	Introduction to Internet Technologies
IT 705	Project Management for Information Technology
MILT 601	Leading Small Organizations I
MILT 602	Leading Small Organizations II
MKTG 620	Topics in Marketing (Sales Management in a Changing World)
PHIL 405	Critical Thinking
PHIL 412	Beginning Logic
POLT 500	American Public Policy
POLT 760	Theories of International Relations
POLT 778	International Organization
PSYC 513	Cognitive Psychology
PSYC 552	Social Psychology
PSYC 553	Personality
RMP 559	Tourism and Event Marketing
SML 560	Sport Psychology
SML 565	Principles of Coaching
TECH 750	Intellectual Asset Management for Engineers and Scientists
THDA 442	Introduction to the Art of Acting
THDA 522	Storytelling, Story Theatre, and Involvement Dramatics
TOUR 510	Tourism and Global Understanding

Additional Course Petitions are subject to review/approval by Sales Minor Coordinator

School of Marine Science and Ocean Engineering

The School of Marine Science and Ocean Engineering (SMSOE) is the University of New Hampshire's first interdisciplinary school, designed to address today's highly complex ocean and coastal challenges through integrated graduate education, research and engagement. As such, it serves as an interdisciplinary nexus for marine science and ocean engineering teaching and research across the University.

Combining traditional faculty and program strengths in oceanography, marine biology and ocean engineering with an emerging marine policy focus, the School of Marine Science and Ocean Engineering provides its students with the scientific underpinnings of these disciplines while training them to contribute to and engage in scientifically-informed policy and resource management. Both the graduate and undergraduate degree programs and undergraduate minors are offered through programs that are integrated between the school and the appropriate colleges and departments at UNH.

https://marine.unh.edu/

Programs

- Marine Policy Minor (p. 732)
- Marine, Estuarine, and Freshwater Biology (MEFB) (p. 432)
- Ocean Engineering (p. 156)
- Ocean Sciences Minor (p. 128)

Programs of Study

- Marine Policy Minor (p. 732)
- Marine, Estuarine, and Freshwater Biology (MEFB) (p. 432)
- Ocean Engineering (p. 156)
- Ocean Sciences Minor (p. 128)

Marine Policy Minor

https://www.unh.edu/program/minor/marine-policy

Description

Marine policy (also referred to as coastal or ocean policy) is a field of study and practice focused on public policy and governance as it relates to marine, ocean, and coastal resources. Effective management of human activities in ocean, coastal, and Great Lakes areas is critical to our future,which includes the setting of public policy as it relates to these systems. Combine this minor with a major such as ocean engineering, biology, wildlife conservation, environmental conservation and sustainability, political science, or others to enhance your career opportunities or prepare for graduate study in science, management, law, or policy.

For more information contact Professor, Gregg Moore, (603) 862-5138.

Requirements

Academic policies related to Minors.

The minor requires five courses for a total of 20 credits.

Code	Title	Credits
Required Courses		
MARI 705	Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy	3
Electives		
Select two courses from the following:		
CEE 520	Environmental Pollution and Protection: A Global Context	4
CEE 705		3
MEFB 702	Sustainable Marine Fisheries	4
NR 437	Principles of Sustainability	4
NR 602	Natural Resources and Environmental Policy	4
NR 720	International Environmental Politics and Policies for the 21st Century	4
NR 754	Sense of Place	2
NR 786	Leadership for Sustainability	4
PHIL 450	Environmental Ethics	4
NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	4
POLT 444	Politics and Policy in a Warming World	4
Select at least one course from the following:		
ESCI 501	Introduction to Oceanography	4
ESCI 502	Beaches and Coasts	4
MEFB 503	Introduction to Marine Biology	4
MEFB 535	Marine Mammal Biology	4
MEFB 590	Coastlines in Crisis	4
MEFB 674	Ecology and Marine Environment	4
MEFB 725	Marine Ecology	4
Additional approved courses:		
ME 706	Renewable Energy: Physical and Engineering Principles	3
NR 403	Introduction to Environmental Science	4
NR 435	Contemporary Conservation Issues and Environmental Awareness	4
NR 784	Sustainable Living - Global Perspectives	4
NR 785	Systems Thinking for Sustainable Solutions	4
NR 795	Investigations	1-4
POLT 751	Comparative Environmental Politics and Policy	4
SOC 565	Environment and Society	4
SOC 665	Environmental Sociology	4

Special University Programs

- Fellowship Office (p. 733)
- Hamel Center for Undergraduate Research (p. 733)
- Hamel Honors and Scholars College (p. 733)
- Health Professions Continuing Education Program (p. 735)
- Pre-law Advising (p. 735)
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Fellowship Office

The **UNH Office of National Fellowships** provides information, counsel, and editorial support to highly motivated and high-achieving students applying for national and international fellowships and scholarships. The office also assists faculty members who serve as mentors and recommenders and arranges for members of the faculty to take part in interviews and serve on screening committees.

In recruiting, advising, and supporting students who excel in various areas, the office collaborates campus-wide with other offices and departments of the University, including the Beauregard Center, the McNair program, the Honors College, the Global Education Center, and the Hamel Center for Undergraduate Research, in support of the University's Academic Plan.

The services of the Fellowships Office are available to undergraduates, graduate students, and alumni of the University. The office is located in Conant Hall Room 118A and Huddleston Hall Room 201A and can be contacted by phone at (603) 862-0733 or email at national.fellowships@unh.edu. Learn more on the website.

Hamel Center for Undergraduate Research

www.unh.edu/undergrad-research/

The **Hamel Center for Undergraduate Research** encourages students to design and carry out research, scholarly, or creative projects in collaboration with faculty mentors. To facilitate this, the Hamel Center offers a variety of competitive research awards and fellowships specifically for undergraduate students. Research may take place during the academic year (including J-Term) or over the summer, with a wide range of programs available to suit each student's particular needs:

- Research Experience and Apprenticeship Program (REAP) offers high-achieving students the opportunity to apprentice with a UNH faculty mentor for ten weeks of full-time research in the summer after their first year.
- Undergraduate Research Awards (URAs) are available each semester (including J-Term and summer) for students at all levels: first year through senior year. The research time commitment is flexible.
- Summer Undergraduate Research Fellowships (SURFs) for the U.S. offer support for ten weeks of full-time research in the summer following sophomore or junior year.
- The International Research Opportunities Program (IROP) offers support for nine weeks of full-time research abroad in the summer following junior year.
- Also, by registering for INCO 590 Student Research Experience or INCO 790 Advanced Research Experience, students at any level can work directly with faculty members while receiving academic credit and support for research expenses.

Once projects are completed, student researchers may receive further support from a Research Presentation Grant to present their work at a conference off campus. Students may also publish their research findings in UNH's online undergraduate research journal, Inquiry*;* write about their research experience on the Hamel Center's Undergraduate Research Blog; and/or present their research at UNH's Undergraduate Research Conference (URC).

Hamel Center research opportunities are available to students across ALL disciplines.

By conducting research at the undergraduate level, students gain professional skills, hands-on experience, and the opportunity to present and publish their findings in professional venues. Awards from the Hamel Center for Undergraduate Research open doors on real-world disciplinary practice, graduate school, post-baccalaureate fellowships, and professional careers. For information about undergraduate research awards and programs, the *Inquiry* journal, or the URC, contact the Hamel Center for Undergraduate Research at 118 Conant Hall, (603) 862-4323, or visit the website at www.unh.edu/undergrad-research.

Hamel Honors and Scholars College

The Hamel Honors and Scholars College (HHSC) was established in 2024, an evolution of the University Honors Program (UHP) that was created in 1983. The HHSC aspires to be regionally, nationally, and globally recognized as a unique academic community where students and faculty can collaborate on innovative transformative thought, learning, and scholarship. It provides a community for motivated, inquisitive, high-achieving students to interact with outstanding faculty while engaging in experiential and community-based learning, external engagement, and meaningful scholarship.

Admissions

The Office of Admissions collaborates with the Honors College to identify a number of qualified incoming first-year students to be admitted to the Honors College. Transfer students are also reviewed for invitation to the Honors College.#After matriculating at UNH, a number of first-year students whose first semester grades are in the top tier of their year in each college are invited to join the Honors College in January. Students may also apply to join the Honors College if they have a GPA of at least 3.5.

Curriculum

To graduate with a designation of University Honors, students must complete 32 Honors Units. Students who transfer to UNH having earned the equivalent of 3 semesters of credits or more at their previous institutions may complete University Honors with 24 Honors Units, but must meet the minimum for each curricular category as described below.

Students choose which Honors Units they will pursue from a menu of academically enriching opportunities, in consultation with Honors College advisors. Units can be earned from both credit-bearing and non-credit activities. Credit-bearing activities typically award the same number of Honors Units as credits (a 4-credit Honors course is worth 4 Honors Units). For non-credit activities, Honors Units are calculated based on

time spent, with each Honors Unit representing approximately 45 hours of work.

Students must complete Honors Units in 4 categories, each of which specifies a minimum number of units. These minimum requirements account for 14 Honors Units; students may choose what courses and experiences will comprise the remaining 18 Honors Units.

1. **Honors Gateway Experiences:** 2 Honors Units
2. **Honors Courses:** At least 8 Honors Units
3. **Cocurricular Learning:** At least 2 Honors Units
4. **Culminating Experience:** At least 2 Honors Units

Honors Gateway Experiences

To support student belonging and connection, the Honors College offers a variety of Gateway Experiences, which are both learning and social activities. Gateway Experiences range from attending campus events followed by facilitated discussions to place-based experiences exploring New Hampshire's natural environment. Upon completion of 4 Gateway Experiences, students are awarded 2 Honors Units.

Honors Courses

Each semester, the Honors College offers a range of courses designed for enhanced academic rigor and depth. Most of these also fulfill UNH Discovery program requirements. Enrollment in these courses is restricted to members of the Honors College. Students who are not members of the Honors College, but who wish to take an Honors course, may email honors.college@unh.edu#to request permission. Most Honors courses are 4 credits, and confer 4 Honors Units.

Students may also designate regular courses as Honors by making an agreement with the professor and completing the Honors Designation Form, specifying additional Honors-level work that engages with the course material on a deeper level. Honors-designated courses earn 2 Honors Units by default. However, if the student and professor agree that the Honors work will be less or more than the standard amount, they may propose that the course count for 1, 3, or 4 Honors Units.

At least 8 units of Honors coursework are required for graduation with University Honors.

Cocurricular Learning

High-impact cocurricular learning opportunities allow Honors students to focus and expand on areas of interest outside the traditional classroom. These experiences include study abroad, research work and experiences, academic peer mentoring and teaching, applying for certain national fellowships, specially designed community-based projects, and more. Students may select experiences from a pre-approved list or propose their own. Each cocurricular experience is assigned a number of Honors Units based mainly on the required time commitment. Students must complete at least 2 Honors Units of cocurricular experiences in order to graduate with University Honors.

Culminating Experiences

In order to graduate with University Honors, each student must complete a Culminating Experience. The Culminating Experience counts for at least 2 and generally for no more than 8 Honors Units, and is usually completed in the Junior or Senior year. Students may complete the Culminating Experience in the following ways:

- **Honors Thesis:** a work of sustained and independent scholarship completed under faculty supervision. Each major sets its own requirements for the thesis, and students register for the thesis course designated by the department. Alternatively, students may elect to write a thesis outside their primary department. This may be appropriate when a student seeks to work with a specific faculty advisor outside their own department or program, or when the envisioned subject or goals of a thesis would not meet the thesis requirements established for their major. In these circumstances, students may seek the help of Honors College advising staff in locating an appropriate faculty advisor. Students are expected to begin thesis planning and communication with faculty well in advance of the semester in which they register. Honors Units will correspond to credits.
- **As Determined by Honors in Major:** Some departments choose to specify a different final Honors experience in their Honors in Major program (a group design project or theatrical performance, for example). Any thesis or Honors final project that has been successfully completed by a student under the applicable requirements for Honors in Major will also be accepted as the Culminating Experience for earning University Honors. Honors Units will correspond to credits.
- **Honors Synthesis:** The Synthesis is an alternative for students who seek a more holistic, less field-specific final Honors experience. It is an exercise in which students reflect on meaningful learning from throughout their college career, create an appropriate deliverable, and communicate their experience with the Honors peer community. Students must seek prior approval of their Synthesis through a proposal that specifies what deliverable they will produce and why this is the best culmination of their Honors journey. Students are also expected to engage in peer review and to share their Synthesis with other Honors students. The Honors Synthesis counts for 2 Honors Units.

Remaining in the Honors College

Honors College students must maintain a minimum cumulative GPA of 3.5 and make continued progress in their accumulation of Honors Units. Students who do not meet these requirements can lose Honors privileges, including priority registration. If requirements are not met for 2 consecutive semesters, students can be removed from the Honors College. Students will have the opportunity to petition to remain in the Honors College before a decision is made.

A grade of B or higher is required for the Honors Thesis and other final Honors experiences.

Graduating with University Honors

Students are responsible for ensuring that all of their Honors experiences are accurately documented in the Honors Unit Dynamic Dashboard in time to be certified to graduate with University Honors. Students must have a final cumulative GPA of at least 3.5 to be awarded University Honors upon graduation. A grade of B or higher is required for the Honors Thesis and other culminating Honors experiences.

Honors in Major

Most majors at UNH include an option for Honors in Major. Requirements are set by each department, not by the Honors College. Experiences

counting toward Honors in Major typically also count toward Honors College completion, but the awards are separate. Students may graduate with University Honors, Honors in Major, or both.

More Information

More information is available at theHamel Honors and Scholars College#website. Honors College students can track their progress and sign up for Gateways and other experiences via the Honors Unit Dynamic Dashboard. You may also#emailhonors.college@unh.edu, call#(603) 862-3928, or visit the Honors College suite on the second floor of Huddleston Hall.

https://www.unh.edu/honors/

Health Professions Continuing Education Program

Description

Offered in Durham and Manchester.

WHAT IS THE HEALTH PROFESSIONS Continuing Education Program?

UNH's Health Professions Continuing Education Program, offered at both our Durham and Manchester campuses, is designed for individuals who have earned a bachelors from an accredited college or university but need to complete the prerequisite requirements for admission to a professional healthcare program. Some individuals may need to enhance their existing academic record by retaking some or all their prerequisite coursework to increase the competitiveness of their application. Other individuals may want to change careers and need to complete all their prerequisite coursework.

WHY COMPLETE YOUR Program AT UNH?

You will complete a rigorous academic program and engage in hands-on learning through fieldwork supported by our state-of-the-art facilities. Our Pre-Professional Health Advising Office helps students interested in pursuing professional degrees make the right academic and extracurricular choicest to prepare for the extremely competitive application process. Students who participate in the Health Professions Continuing Education Program will be provided with personalized advising from the Pre-Professional Health Programs Advisor to assist in course registration, answer questions about the application process, review application documents, and navigate other admissions requirements.

WHAT CLASSES DO I NEED TO COMPLETE?

While most professional programs require similar courses, the classes you need to take depend on the type of program you are planning to apply to in the future. It also depends on what type of student you are. Record enhancers may want to retake all their prerequisite courses to improve upon their grades or only retake the classes where they earned below B. Career changers, who may have taken some of the non-science prerequisite courses, may want to retake these courses if they are over 5 years old.

Most students apply to medical, dental, and physician assistant programs; the commonly required courses are listed below:

Code	Title	Credits
Medical & Dental		
BIOL 411	Introductory Biology: Molecular and Cellular	4
or BIOL 413	Principles of Biology I	
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
or BIOL 414	Principles of Biology II	
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 651 & CHEM 653	Organic Chemistry I and Organic Chemistry Laboratory	5
CHEM 652 & CHEM 654	Organic Chemistry II and Organic Chemistry Laboratory	5
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
English - one year		8
Psychology - one semester		4
Sociology - one semester		4
Statistics		4
Calculus		4
Physician Assistant		
BIOL 411	Introductory Biology: Molecular and Cellular	4
or BIOL 413	Principles of Biology I	
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
or BIOL 414	Principles of Biology II	
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BMCB 658	General Biochemistry	3
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
Psychology - one semester		4
Statistics - one semester		4

Pre-law Advising

The faculty and staff advisors of the UNH Pre-law Advising Committee work closely with students and alumni to identify interests and explore opportunities within legal education. The committee helps students undertake the best possible preparation for legal education while also bringing the excitement of law to UNH students. The committee achieves this goal through careful consideration of the American Bar Association's (ABA) statement on preparation for legal education.

In that statement, the ABA explains why no single major or course is required or recommended for students wishing to explore or prepare for legal study. The ABA does, however, describe certain skills and values that are essential to success in law school and to life as a lawyer. These include analytic and problem solving skills, critical reading abilities, writing skills, oral communication and listening abilities, general research skills, task organization and management skills, and the values of serving others and promoting justice.

Pre-law Advising implements the ABA statement by working with student interests and strengths to select UNH courses, internships, leadership opportunities, and experiences that will develop those skills and values. Programmatically, the committee offers individual appointments, sponsors visits to local law schools, and organizes discussions with law school students, admission and financial aid representatives, and with members of the legal community. The committee also provides advising support for LSAT preparation, law school search, writing personal statements, and the application and selection processes.

The Pre-law Advising Office is located in 110 Murkland Hall. Additional information and to schedule an appointment visit the Pre-Law website.

Accelerated Academic Programs

UNH offers three accelerated programs that allow students to earn both a bachelor's degree and a law degree in six years instead of seven:

- English Major: Law 3+3 Option
- History Major: Law 3+3 Option
- Political Science Major: Law 3+3 Option

https://cola.unh.edu/pre-law

Pre-Professional Health Advising

The Pre-Professional Health Programs Advising Office in Rudman Hall provides advising for all students preparing for postgraduate careers in healthcare including, but not limited to: medicine, dentistry, chiropractic, naturopathic medicine, optometry, pharmacy, physical therapy, and physician assistant programs. There is no pre-health major at UNH since professional healthcare programs do not evaluate applicants based on undergraduate major. Interested UNH students should register with the Pre-Professional Health Programs Advising Office online by joining the pre-health email list and be kept informed of important events, opportunities, and deadlines regarding preparing for the upcoming application cycle.

Identifying as a pre-health student at UNH consists of the following:

1. *Taking the prerequisite courses for admission.* A list of the specific prerequisite courses for each intended health profession can be found on the UNH Pre-Health website.
2. *Gaining volunteer and healthcare experience.* Applicants to health professional programs will be expected to demonstrate a sustained involvement in volunteer and community service. It is also expected that applicants have shadowed healthcare providers. Many students volunteer in various healthcare and non-healthcare settings and some students seek out licensure and certificates to provide hands-on patient care. These experiences often include working as an EMT, LNA/CNA, MA, or phlebotomist.
3. *Preparing for entrance exams.* Many professional healthcare programs require their applicants to take a standardized entrance exam prior to matriculation. Students applying to medical school are required to take the MCAT exam. Students applying to dental programs are required to take the DAT. Students applying to optometry programs must take the OAT. The MCAT, DAT, and OAT are standardized, comprehensive exams that test students' knowledge of biological and physical sciences as well as verbal reasoning and writing skills. Exams are usually taken once the student has completed prerequisite coursework. Students applying to physician assistant and physical therapy programs may be required to take the GRE, a more general exam similar to the SAT in structure and content.

Application Process

The Pre-Professional Health Programs Advising Office works with the Pre-Professional Health Advisory Committee, a group of 12-15 UNH faculty members and local healthcare providers, to provide students with comprehensive, confidential evaluation services at the time of application. An application information meeting is held each fall to outline the application process and establish timetables and deadlines. Students should note that the medical and dental school application process begins a full two years before matriculation; e.g., in the fall of a student's junior year if they wish acceptance following graduation. However, a delay of a year or more between graduation and admission is neither unusual nor detrimental, and in many cases, students can use this time to improve their credentials by taking additional courses and/or gaining exposure to the profession.

It is important that students understand that in order to gain admission to a health professional program they must not only satisfy the prerequisite requirements, they must satisfy these requirements at a high level of achievement. The Pre-Professional Health Programs Advising Office can provide students with information on competitive GPA and entrance exam scores for each of the postgraduate health professional programs.

The Pre-Professional Health Programs Advising Office is located in Rudman Hall and can be contacted by phone at (603) 862-3831 or by email at Prehealth.Advising@unh.edu (Premed.Advising@unh.edu).

https://colsa.unh.edu/academics/pre-professional-health-advising

Regional Student Exchange Programs

New Hampshire Consortium (NHCUC) Student Exchange Program

Under the Student Exchange Program of the New Hampshire College and University Council (NHCUC), UNH students may be eligible to enroll for one course per semester, one full semester of courses, or a full year of coursework at a member school on a space-available basis. The NHCUC exchange allows matriculated undergraduates to use educational resources that are not available at the home campus and are considered appropriate for their degree programs. Approval of the UNH academic advisor and exchange coordinator is required, and students must meet all UNH Study Away eligibility standards. Institutions that participate in the NHCUC student exchange consortium include Colby-Sawyer College, Franklin Pierce University, Hellenic American University, New England College, Southern New Hampshire University, Rivier University, Saint Anselm College, UNH Durham, UNH College of Professional Studies, Keene State College, and Plymouth State University. Students will remain as degree candidates and continue to pay normal UNH tuition and fees, but must make their own room and board arrangements if they plan to spend a full semester at another consortium school. For more information and an application, students should contact the UNH Registrar's Office at Registrars.Office@unh.edu.

New England Land-Grant Exchange Program

In order to provide students at the New England land-grant universities with expanded access to unique programs and faculty expertise, the institutions have agreed to encourage student exchanges of one, but not more than two, semesters. To qualify, students must identify a course or combination of courses related to their area of academic interest and not available on their home campus, be degree candidates in good standing with at least a 2.5 grade-point average, be at least first-semester sophomores, and receive permission from the appropriate university exchange authorities at both the home and host institutions. For more information students should contact the UNH Registrar's Office at Registrars.Office@unh.edu.

Reserve Officer Training Corps Programs

Students attending the University of New Hampshire may enroll in the **Air Force Reserve Officer Training Corps** (AFROTC) or in the **Army Reserve Officer Training Corps** (AROTC) at the University.

The Army ROTC and Air Force ROTC offer programs leading to a commission as a second lieutenant in their respective services. Students in either ROTC program may pursue any University curriculum that leads to a baccalaureate or higher degree.

Two- and four-year programs are available. The four-year program is open to freshmen, sophomores, and transfer students. The two-year program is open to students who have at least two academic years remaining in their college/university degree program. In addition to on-campus course requirements, students must attend an officer-preparatory training session for a part of one summer.

ROTC scholarships are offered on a competitive basis by both the Army ROTC and Air Force ROTC. Entering freshmen may compete for four-year scholarships during their last year of high school. Additionally, incoming students may compete for scholarships while already in college if they meet specific ROTC requirements. Scholarships may pay up to full tuition, mandatory fees, and required textbooks for college courses. Incoming students with either a four-year or three-year ROTC scholarship may receive a full or partial room and board grant for the entire time they are on an ROTC scholarship. In addition, all scholarship recipients receive a tax-free monthly subsistence allowance. Non-scholarship students in the last two years of the ROTC program also receive the tax-free monthly subsistence allowance.

Both ROTC programs have administrative and medical requirements, which must be met to qualify for a scholarship and a commission.

More specific information about ROTC programs may be obtained by contacting Army ROTC at (603) 862-1078 or Air Force ROTC at (603) 862-1480.

Army ROTC website

Air Force ROTC website

Air Force Leadership Minor

Description

The minor in Air Force Leadership consists of courses in aerospace studies, two semester-long leadership positions and field training as outlined in the requirements.

Requirements

Academic policies related to Minors.

1. Minimum GPA of 3.20 in Aerospace Studies courses.
2. Successful completion of 8 semesters of AERO 301[1].
3. Held at least two semester-long leadership positions, one of which was a leadership position in the AFROTC Group.
4. Successful completion of Field Training.

Code	Title	Credits
Required Courses		
AERO 415	Heritage and Values of the United States Air Force I [1]	2
AERO 416	Heritage and Values of the United States Air Force II [1]	2
AERO 541	Team and Leadership Fundamentals I	2
AERO 542	Team and Leadership Fundamentals II	2
AERO 671	Leading People and Effective Communication I	4
AERO 672	Leading People an Effective Communication II	4
AERO 681	National Security Affairs/Preparation for Active Duty I	4
AERO 682	National Security Affairs/Preparation for Active Duty II	4
Total Credits		**24**

[1] The program often has National Guard or Reserve service members join the program to transition onto active duty with a commission. Students with this status are exempt from the first year of ROTC requirements because they have already gained this experience during their time in service. As such, AERO 415, AERO 416, and two semesters of AERO 301 are waived for these students in the pursuit of the minor.

Study Abroad Programs

UNH Global

The University offers opportunities for full-time degree candidates meeting eligibility criteria to pursue a wide variety of education abroad experiences, including study, intern, service and research in many countries around the world. UNH faculty-led and exchange study programs are described in this section. Program availability is subject to UNH international risk management policies. All students who study abroad pay a program fee or tuition, study abroad administration fee and an international travel insurance fee. For more information, contact UNH Global at (603) 862-2398 or study.abroad@unh.edu.

Belize

ANTH 674 Archaeological Survey and Mapping in Belize

A January-term course, ANTH 674 Archaeological Survey and Mapping in Belize, offers students hands-on training in survey and mapping techniques, as well as digital cartography using ArcGIS mapping software. For more information, visit cola.unh.edu/belize-mapping.

British Virgin Islands

MEFB 590 Coastlines in Crisis

This spring semester course travels to the British Virgin Islands during spring break. We will explore trends threatening resilience of our coasts and their inhabitants. The science and public perception of coastal threats, sea level rise, and climate-related issues will build a baseline for understanding the issues coastal communities face, including contributing factors, and the role of science, technology, and environmental policy in the delicate balancing act between nature and infrastructure. For more information, visit https://colsa.unh.edu/study-abroad.

Costa Rica

UNHM BSCI 620 Global Science Exploration

BSCI 620 Global Science Exploration includes a spring break trip to Costa Rica investigating living organisms in their natural habitat. Students will participate in pre-trip seminars on the country, local flora, fauna and habitats they will visit. Students will design a project to integrate their personal interests and objections with in-country investigation. Post-

trip seminar will focus on preparation of project and its presentation. Permission required.

Cuba

LLC 555 Discover Cuba - January Term

A January Term course, LLC 555 Discover Cuba: An Arts Experience, illuminates the rich and lively art, history, culture, music, and architecture of Cuba through lectures, tours, guided readings, and site visits. Led by Prof. Lucia Montás (lucia.montas@unh.edu), UNH Spanish Program, students will participate in an online academic component prior to a 10-day experiential learning trip to Cuba. The program will be based in Havana in partnership with Abroadia. All course and site work conducted in English – no knowledge of Spanish required. For more information, visit https://cola.unh.edu/cola-study-abroad/programs/cuba-discover-cuba-j-term.

Germany & German-speaking countries

study abroad in GermanY

Students may study for a semester or a full year through an approved study abroad Partner Program or, in special cases, by applying directly to universities in Germany, Austria, or Switzerland. Many programs require a minimum grade-point average of 3.0 and a B average in the major. Programs vary greatly in academic focus, size, language of instruction, living arrangements, services, and extra-curricular programming provided, and cost. Study abroad goals and requirements should be discussed with a German adviser as early as freshman year. Program and application materials may be obtained through the UNH Global Education Office. For credit in the German major or minor, the program must be conducted in German. After consultation with the major adviser and the study abroad adviser to establish possible UNH course equivalents and fulfillment of major and/or Discovery Program requirements, students submit a planning form indicating the planned course of study abroad. To ensure proper credit transfer, especially if seeking to transfer credits directly from a university abroad without benefit of a Partner Program, students should keep syllabi, course descriptions, and all written work. Students planning study at a university in Germany, Austria, or Switzerland should note major differences in academic calendar (winter semester October-February, summer session April-July), which may be shortened by the Partner Program to accommodate U.S. academic calendars.

German Internship

Students who have completed GERM 504 Intermediate German II or equivalent may apply for a 4-8 credit internship placement in a German-speaking firm or organization. The internship does not alone fulfill the study abroad requirement for the major, but may count toward the minor and may be coupled with academic course work through UNH or any study abroad program to fulfill the major study abroad requirement.

Greece

UNH in GREECE SUMMER PROGRAM

The 5-week UNH-in-Greece Sumer Program is open to any undergraduate at UNH who is interested in the long history of civilization in Greece, from the classical period to the present day. Athens is famous as the most important city-state in ancient times and as the site of some of the world's most famous and influential architecture and art, but it is also the vibrant capital of modern Greece (The Hellenic Republic), and that combination of antiquity and modernity, as well as the city's position between West and East, makes it an extraordinary location for on-site, experiential learning. Students earn a total of 10 credits from courses taught by both UNH and Hellenic American University faculty. For more information, visit cola.unh.edu/greece.

Hungary

Budapest justice studies and humanities program

The UNH Budapest Spring Semester Program is open to any student interested to deepening their knowledge of modern European history, culture, and justice systems. Students take a combination of four courses taught by the UNH faculty member in-residence and course offerings from Károli Gáspár University of Budapest. Situated along the Danube River, Budapest is an exciting and cosmopolitan city, close to other beautiful European cities such as Prague and Vienna. Under the supervision of a UNH faculty member also in residence, students carry a four-course load, two of which are taught by the UNH faculty member. The program satisfies Historical Perspectives, World Cultures, and, depending on course selection, Humanities and Fine & Performing Arts Discovery Program requirements. All courses are taught in English. For more information, visit cola.unh.edu/budapest.

Ireland

SW 785 Study Abroad: Comparative Social Welfare Systems / SW 885 Study Abroad Summer Program

Students studying abroad on SW 785 Study Abroad: Comparative Social Welfare Systems/SW 885 Study Abroad Summer Program, examine the historical development of social welfare in another country, including an analysis of the underlying values and attitudes that direct practice and policy decisions. This 10-day, 4-credit class includes agency site visits, lectures, themed readings, and visits to important cultural sites. Prerequisites are SW 424 Introduction to Social Work and SW 525 Social Welfare Policy: History of Social and Economic Justice. Previous programs have visited Ireland, England, Scotland, and Latvia.

ENGL 565 Literary Dublin: Short-Term Study Abroad summer program

This two-week UNH program allows students to re-imagine what we mean by "Irish" and "Irish American." It introduces a racially diverse side of Dublin specifically, and Ireland broadly, in concert with Irish Americanness as racially other at one time, and subsequently racially white. Through writing, reading, on-site visits and tours, and a host of lectures, students will gain an appreciation of Ireland's many challenges of self- and other identity related to its location, conquest, colonization, emigration, religions, and recent global immigration. The course will provide students who identify as Irish an opportunity to research their genealogy. Student will earn 4 credits for this course, ENGL 565 Literary Dublin: Short-Term Study Abroad. The experience begins in the U.S. with virtual meetings for one week (Monday through Friday, three hours daily), then moves overseas to Dublin for 10 days. For more information, visit https://cola.unh.edu/cola-study-abroad/programs/ireland-literary-dublin

Italy

UNH-in-Italy Program

Semester & Summer Programs. In partnership with the UNH Department of Agriculture, Nutrition & Food Systems, the UNH-in-Italy Program offers students the opportunity to experience living abroad in the medieval city of Ascoli Piceno, for either a four-course, 13-week semester or a two-course, 5-week summer session. The curriculum focuses on the links between food culture, sustainably-focused agriculture, and the policies and issues impacting the food system. Experiential activities, field trips, and group excursions encourage students to immerse

themselves in the unique educational opportunity. Students live in apartments in the historic center of the city and take UNH courses taught in English. The program is open to all UNH students and fulfills the International Experience requirement of the EcoGastronomy Dual major. For more information, please contact Jesse Stabile Morrell (jesse.morrell@unh.edu).

Rome J-Term Program

The Rome Program provides the opportunity to take a January term course in Rome, Italy. Students earn 4 credits and the Fine and Performing Arts Discovery requirement through CLAS 510 Building Rome *or* 4 credits and the World Cultures Discovery requirement through ITAL 510J Rome: The Eternal City in Italian Culture. Experience the history, architecture, and art history of the ancient Romans the way they did—in Rome, Pompeii and other sites itself—and get a sense of the majesty and miracle that was the ancient Roman Empire. A five-day online component prepares students for the on-site portion so that they will be ready to soak in the monuments of the past. For more information, visit cola.unh.edu/rome.

Bologna Summer PROGRAM

This 6-week summer program in Bologna, Italy, will introduce UNH students to the history and contemporary culture of the city of Bologna. Students choose between two academic tracks — either language or culture — in addition to completing a 2-credit experience in Italian cinema based on their participation in the prestigious Cinema Ritrovato film festival. All students will earn 10 credits during the program. Bologna is a city of approximately 400,000, located in north/central Italy, known for its rich cultural life and rich cuisine. Students will visit locations such as its numerous historic libraries and museums, its contemporary art spaces, the FICO Eataly World (the largest food park in the world), and parks and gardens throughout the city. For more information, visit https://cola.unh.edu/cola-study-abroad/programs/italy-bologna.

Japan

Saitama University Exchange Program

Accelerated Japanese language learning on Saitama University's park-like campus, just outside Tokyo. With its moderate size (9,000 students), generous scholarship opportunities, dynamic student life and recreation facilities, Saitama is an ideal fit for UNH students interested in Japanese language and culture. The university also has a wide variety of courses taught in English, which draws students from around the world. Saitama is known as the "Oasis of Tokyo"—a historic city whose forests were planted centuries ago by peace-loving Samurais who nurtured the land instead of living by the sword. Saitama is the famous backdrop for Japanese animated films. Tokyo is less than an hour away by train. For more information, contact UNH Global, (603) 862-2398, email study.abroad@unh.edu or visit www.unh.edu/global/education-abroad.

Waseda University Exchange Program

Study abroad at one of Japan's "Ivy League" universities while paying UNH tuition. Spend a semester or academic year studying in central Tokyo, with over 50,000 students, including 5,000 international students from more than 100 countries. UNH students can enroll in a wide range of courses in English in the liberal arts, business, social sciences, political science and economics, and of course, Japanese language and culture. Waseda has a unique volunteer center, which combines lectures with hands-on activities in the field. For more information, contact UNH Global, (603) 862-2398, email study.abroad@unh.edu or visit www.unh.edu/global/education-abroad.

Namibia

ANSC 690 Livestock and Wildlife in Namibia: Challenges, Opportunities and Geography

This semester-long course explores the economic, historic, geographic, scientific and cultural aspects of livestock and wildlife management in Namibia and includes a spring break trip to Namibia. Its people developed unique models of conservation, as alternatives to national parks and private land in managing wildlife and livestock. Students will gain insight into this unique country and its animals, through lecturers, research, writing and direct interaction with practitioners in the study abroad component. Contact Professor Drew Conroy (drew.conroy@unh.edu), the instructor for this course.

The Netherlands

Radboud University Nijmegen Exchange program

Nijmegen is the oldest city in the Netherlands: it was founded by the Romans more than two thousand years ago. It is a vibrant, green, and safe student town of about 175,000 people, just a few miles from the German border. It only takes a little over an hour by train to get to Amsterdam, and it has great international train connections to Brussels, Paris and Berlin. The city has a very active student life and is also a host to countless festivals and sports activities like the Four Day Marches. Radboud University Nijmegen has about 23,000 students (about 11% of them are international). The campus is beautiful, with lots of green space, incredible buildings and has a state-of-the-art sports center. This semester exchange is open to all Majors. General info can be found at www.ru.nl/exchangestudents. For more information, contact UNH Global, (603) 862-2398, email study.abroad@unh.edu or visit www.unh.edu/global/education-abroad.

Utrecht University Exchange Program

Open to undergraduate and graduate students in all fields, Utrecht University is one of the top research universities in Europe, with the largest undergraduate population and the largest research budget in the Netherlands. The size, status, and international population of the university ensure that courses in all areas of study are offered in English; these include the humanities, social and behavioral studies, law, economics, governance, and geosciences. Utrecht is the fourth largest city in the Netherlands. It has a classically old-Dutch city center with 17th century buildings, a medieval church, several high-quality museums, and terraced canals that encircle the old city. A university town since the medieval period, Utrecht has long enjoyed a vibrant student culture. Utrecht is easily navigable by foot, bicycle, and bus; the center of the Dutch rail system, it enjoys easy access to other cities in the Netherlands and Europe (Amsterdam is 35 minutes away; Paris three hours; London a day trip by plane). For more information, contact UNH Global, (603) 862-2398, email study.abroad@unh.edu or visit www.unh.edu/global/education-abroad.

University College Utrecht Exchange Program

An honors exchange is available at the University College Utrecht (UCU), which is an international Liberal Arts and Sciences Honors College of Utrecht University. UCU's mission is to offer ambitious students an academic environment aimed at transforming their broad academic and social interests and their international orientation into academic excellence, intellectual independence, and world citizenship. UCU specializes in undergraduate education and students choose

from courses in humanities, science, and social sciences. Among the special characteristics are the college's small classes and individual attention. Students have access to all academic, social, and recreational facilities that Utrecht University has to offer. For more information, contact UNH Global, (603) 862-2398, email study.abroad@unh.edu or visit www.unh.edu/global/education-abroad.

New Zealand

UNH-ECOQUESt: Ecology in action

In partnership with COLSA's Department of Natural Resources and the Environment, the EcoQuest Education Foundation offers an intensive program of applied field studies in ecology, resource management, and environmental policy. New Zealand offers an ideal context for multidisciplinary, field-oriented studies, with its rich cultural traditions, diverse ecosystems, expansive natural areas, and history of innovative approaches to resource management. EcoQuest students engage hands-on in New Zealand's restoration ecology and sustainable resource management initiatives. Semester participants have the opportunity to carry out team oriented, directed research projects while working closely with a faculty mentor and in association with New Zealand research partners. The rural seaside campus is located about an hour's drive southeast of Auckland. Students travel throughout New Zealand's North and South Islands, from the mountains to the sea, to learn more about the unique ecosystems and local culture

Students may choose either a four-course, 15-week fall or spring term for 16 credit hours, or a two-course, five-week summer session for eight credit hours. The UNH-EcoQuest Academic Coordinator is Kimberly Babbitt, Associate Dean of Academic Affairs, COLSA. Contact Donna Dowal, EcoQuest Director of Admissions, at (603) 862-2036 or Eco.Quest@unh.edu.

UNH-EcoQuest: Sustainable Agriculture and Food Systems Aotearoa (SAFSA)

In partnership with COLSA's Department of Agriculture, Nutrition, & Food Systems, the EcoQuest Education Foundation offers an intensive field studies program in sustainable agriculture, land management, systems thinking, and food production. Students will gain an in-depth understanding of global trends in agricultural sustainability and the challenges and manifestations of these trends in Aotearoa New Zealand.

Students engage with various agribusinesses in New Zealand and consider agriculture in an ecosystems framework, aligning land use with land use capability, while examining the political, economic and cultural context. The Maori agribusiness sector is distinctive and offers unique opportunities for collaborative models. The integration of people, communities, and values with primary production systems can ultimately result in vibrant and multi-cultural approaches to food systems.

Four fully integrated courses focus on land use capability and sustainability, agroecology and sustainable land management, and pathways to sustainable agriculture and food systems. Each semester, students will spend time in farm or agricultural placements. These practical, hands-on experiences will allow students to gain transferable skills and develop a comprehensive understanding of sustainability initiatives and practices in food systems. Program participants will gain life and professional skills to engage with sustainable food systems as pro-active, solution-focused practitioners.

Students may choose either a four-course, 15-week fall or spring semester term for 16 credit hours. The UNH-EcoQuest Academic Coordinator is Kimberly Babbitt, Associate Dean of Academic Affairs, COLSA. Contact Donna Dowal, EcoQuest Director of Admissions, at (603) 862-2036 or Eco.Quest@unh.edu.

Norway

University of Southeastern Norway - Bø, Norway

If you want to learn about and practice Norwegian outdoor life (or "friluftsliv") than this program is meant for you! The main focus will be on hiking, canoeing and sailing. The study includes both day excursions and extended overnight trips on waterways, in the mountains and forests and at the coastline. You will also get a thorough introduction to the history and development of Norwegian outdoor life and have the opportunity to develop your own relationship with nature! Through excursions into nature during the fall combined with theoretical lectures students will gain practical and theoretical knowledge needed in nature guiding, nature management and outdoor leadership. Students will go on extended excursions along waterways, forests and mountains and at the coastline. For more information, contact Professor James Hannon (jhannon@plymouth.edu) at PSU or the Study Abroad Office at UNH.

Spain

Universidad Carlos III de Madrid Exchange Program

Study abroad in Madrid, Spain's historic and artistic capital that never sleeps. Universidad Carlos III de Madrid, named after a former king of Spain, offers a dynamic campus of 18,000 students and the largest offering of courses taught in English in Spain. Courses are available in the areas of engineering, business (AACSB accredited), finance, accounting, economics, and political science. For more information, contact UNH Global, (603) 862-2398, email study.abroad@unh.edu or visit www.unh.edu/global/education-abroad.

United Kingdom

England

Lancaster University Exchange Program

Lancaster University is a comprehensive university similar to UNH in size, setting, and program offerings. The program allows students to spend a semester or a year in Lancaster while still making normal progress toward their UNH degree. Lancaster enjoys a diverse campus and is centrally located for travel to Scotland, Wales, Ireland, and London. For more information, contact UNH Global, (603) 862-2398, email study.abroad@unh.edu or visit www.unh.edu/global/education-abroad.

London Spring Program

The London Program offers students the chance to spend the spring semester at Regent's University in the heart of London, choosing from courses in the arts, humanities, social sciences, business, and a wide range of other basic subjects. Students take a combination of courses taught by the UNH faculty-in-residence and Regent's offerings, while living on the well-positioned campus. For more information, visit https://cola.unh.edu/cola-study-abroad/programs/england-unh-london-program.

THDA 531 The London Experience J-term program

This course THDA 531 provides a wonderful opportunity to learn about one of the greatest cities in the world. Travel to the United Kingdom for nine nights/ten days during the January term. See the many amazing historical and cultural sights and take in some of the best theatre in the English-speaking world. The course offers insight into the politics, society, and culture of London and the United Kingdom as students walk,

tube, and double-decker bus their way through 2000 years of history. The 4-credit class fulfills the Fine and Performing Arts Discovery requirement. For more information, visit cola.unh.edu/london-experience.

ENGL 703 London Travel Writing january term program

ENGL 703 Travel Writing is for the adventurous. In three weeks, students will learn to navigate London, one of the world's greatest cities, and craft compelling, vivid essays about what they've discovered. Through curiosity, research, and writing they will transcend from tourist to traveler, gaining a confidence in their ability to master the unfamiliar as well as pen publishable stories about place. Prerequisite of ENGL 501 Introduction to Creative Nonfiction or permission of instructor. For more information, visit cola.unh.edu/london-writing.

Scotland

Heriot-Watt University Exchange Program

College of Engineering and Physical Sciences students are eligible to participate in a spring semester exchange with Heriot-Watt University in Edinburgh, Scotland. Heriot-Watt is one of the UK's leading universities for business and industry and has a reputation for innovative education, enterprise, and leading-edge research in science, business, engineering, and design. Often referred to as Scotland's international University, a third of on-campus students in Scotland come from outside the UK, there are campuses in Dubai and Malaysia, and 50 international academic learning partners in 30 countries. The current program is designed for civil and environmental engineering majors. For more information, contact UNH Global, (603) 862-2398, email study.abroad@unh.edu or visit www.unh.edu/global/education-abroad.

Wales

Cardiff University Exchange Program

Study abroad at one of the UK's "Ivy League" universities while paying UNH tuition. Founded in 1883, Cardiff University is recognized as one of the leading research and teaching universities in the UK and a member of the Russell Group, the UK's "Ivy League" of world-class universities. Spend a semester or academic year studying at Cardiff and benefit from learning with professors who are pioneers in their fields. Over 27,000 students have been drawn to Cardiff University, coming from Wales, the rest of the UK and more than 100 countries. UNH students can enroll in a wide range of courses and are guaranteed housing in student halls of residence, living among British and other international students. Cardiff is an excellent match for majors in music, computer science, communications, and journalism. The University boasts over one hundred clubs, sporting teams, and societies. Cardiff University is located in the center of the capital of Wales, an exciting and diverse city and the heart of Welsh history, culture, street life, and politics. There is something for everyone in the Welsh capital, with the excitement of the small city campus located just minutes from the beautiful coastlines, hills, walking trails, and green countryside for which Wales is famous. For more information, contact UNH Global, (603) 862-2398, email study.abroad@unh.edu or visit www.unh.edu/global/education-abroad.

https://www.unh.edu/global/

Thompson School of Applied Science

The Thompson School of Applied Science (TSAS), established in 1895, is an academic unit of the College of Life Sciences and Agriculture (COLSA) offering the associate in applied science degree in two program areas. Curricula comprise a balance of professional, science-related, and general education courses that prepare students to meet the specific demands of a technical or applied profession, continuing education, and the general demands of life.

The Thompson School of Applied Science offers dedicated professional faculty who deliver a career-relevant education for students who want an associate degree; students who value a college education combining hands-on experiences and academic knowledge in a small learning environment within the campus of the University of New Hampshire.

Thompson School faculty and staff are committed to educate, train, and retain students to be entrepreneurs, to be solid in their knowledge, to be competent in acquired skills and to be aware of the communities they impact. This is accomplished through the development of mentorships with faculty and advisors, business and industry partnerships, unique programs of study with relevant facilities, and excellent job placement.

Thompson School of Applied Science Overview

Faculty members at the Thompson School have significant work experience in industry and business; extensive and up-to-date knowledge of their specialties; ongoing contacts with practicing professionals; dedication to students and to excellence in teaching; and a commitment to practical, science-based education. They work closely with students, providing academic advising, career counseling, and special assistance, even outside the classroom, when needed.

Detailed information on our program areas and concentrations follow.

- **Applied Animal Science** students pursuing this associate's degree prepare for a successful career in animal production and management, whether working on a farm or in a related business. Students handle farm animals starting week one, and develop a strong foundation in the science and business of animal agriculture, including breeding, feeding, health care, law and regulations, housing, and marketing. On-campus facilities include the Thomas P. Fairchild Dairy Teaching and Research Center and UNH's Organic Dairy Research Farm.

- **Veterinary Technology** students have the unique opportunity to work with both small and large animals at UNH and have access to professional facilities both on and off campus. On-campus facilities include the Thompson School PAWS Veterinary Clinic, Thomas P. Fairchild Dairy Teaching and Research Center, UNH's Organic Dairy Research Farm, and UNH's equine facilities. The program also partners with the New Hampshire SPCA (Stratham, N.H.), Cocheco Valley Humane Society (Dover, N.H.), and Pope Memorial SPCA (Concord, NH). The program is accredited by the American Veterinary Medical Association (AVMA). Students who graduate from an accredited program are eligible to take the Veterinary Technician National Exam (VTNE) to become a credentialed veterinary technician.

Transfer Opportunities

Students completing an associate degree program often apply for transfer into a baccalaureate program. The Applied Animal Science and Veterinary Technology programs have two plus two articulations with the B.S. in Animal Science. Thompson School students can also transfer into many other baccalaureate majors. A final cumulative grade-point average of at least 2.5 is required for transfer to most programs; some UNH baccalaureate programs require a higher cumulative grade-point average. Other colleges and universities, especially those within the University System of New Hampshire, also welcome graduates from the Thompson School.

https://colsa.unh.edu/thompson-school-applied-science

Programs

- Applied Animal Science (AAS) (p. 742)
- Veterinary Technology (VTEC) (p. 744)

Programs of Study

- Applied Animal Science (AAS) (p. 742)
- Veterinary Technology (VTEC) (p. 744)

Applied Animal Science (AAS)

Applied Animal Science (AAS) provides students with hands-on practical skills with farm animals. The core program offers a solid background in animal behavior, handling, anatomy, physiology, nutrition, health, and animal breeding. The curriculum is focused on animal agriculture and emphasizes decision-making, technologies, and processes that address the realities of modern agriculture.

Practical learning experience is provided at the Thomas P. Fairchild Dairy Teaching and Research Center and the UNH Organic Dairy Farm. The Thompson School also operates its own veterinary clinic and biology laboratories. The curriculum has a number of animal-related educational partnerships that include field trips to numerous animal-related businesses.

https://colsa.unh.edu/thompson-school-applied-science

Programs

- Applied Animal Science (A.A.S.) (p. 742)

Faculty

Thompson School of Applied Science Faculty

Applied Animal Science (A.A.S.)

https://www.unh.edu/program/associate-applied-science/applied-animal-science

Description

The demand for and production of meat, milk and fiber from animals is expected to continue to grow for decades to come. Students interested

in working in the highly technical, rapidly changing field of farm animal production and management, must become well versed in the many species of farm animals, including breeding, feeding, health care, housing and marketing. In the animal agriculture concentration, students apply many of the skills learned in the classroom on farms in the first few semesters of the program. Students learn to work safely with farm livestock and/or poultry. They visit farms and engage in hands-on activities with their instructors. Students will learn to balance rations, identify and treat diseases. They will design appropriate buildings, fences, and learn how to properly care for the land and environment necessary to support farm animals. Students visit and interact with nearby farms with sheep, goats, swine as well as dairy and beef cattle.

Students are encouraged to embrace opportunities to work and study at the University's farms. UNH maintains two modern and well-equipped dairy teaching and research centers, and as an option students interested in dairy cattle can also collaborate to manage the CREAM (Cooperative for Real Education in Agriculture) herd. All students will also study at the UNH Organic Dairy Research Farm. Students will have the chance to also work with horses, sheep, and poultry on campus.

Students learn the business of farming through field exercises in land management, forage production, financial management, and computer use on a farm as well as through continued practical experience with farm livestock, poultry and dairy cattle. The program prepares students to work both on the farm and in related businesses.

The Thompson School's Animal Agriculture program is in a unique position with the baccalaureate animal science major. Students may start with the Thompson School program, obtain their associate in applied science (A.A.S.) degree then transfer to a four-year major. There they would obtain a B.S. with two additional academic years of full-time study. This allows students to receive two degrees in as little as four years or obtain their A.A.S. degree and work in the field to later return for a B.S. Students wishing to follow this course of action need to work closely with their adviser and maintain a grade of C or better in key applied animal science courses.

Career Opportunities

Herd or flock manager, agricultural sales and/or service employee, farm manager, artificial insemination (AI) technician, crop manager, farm owner, or animal care or training professional.

Admissions Requirements

Applicants to the applied animal science program area must present four years of college preparatory English and at least two years, preferably three years of satisfactory work in college preparatory science (one of the sciences being biology, with a lab). One year of laboratory college preparatory chemistry is highly recommended. Also required are three years of social science, and three years of college preparatory mathematics.

Requirements

Degree Requirements

Minimum Credit Requirement: 64 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Applied Animal Science Major Requirements

Applied Animal Science (AAS) students must maintain a minimum 2.0 cumulative grade-point average. Students with averages lower than 2.0 must repeat classes with lower grades and raise their average to the required 2.0 before taking additional classes. Students must have a minimum cumulative 2.0 grade-point average in AAS classes to qualify for graduation from the program.

All Applied Animal Science students are required to take:

Code	Title	Credits
AAS 423	Dairy Selection	2
AAS 432	Introduction to Forage and Grassland Management	3
AAS 434	Equipment and Facilities Management	3
AAS 597	Applied Animal Science Work Experience	0
ADMN 400	Introduction to Business	4
ANSC 406	Careers in Animal Science	1
ANSC 421	Introduction to Animal Science	4
ANSC 543	Technical Writing in Animal Sciences	2
ANSC 548	Agricultural Business Management	4
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM) [1]	4
or ANSC 603	Introduction to Livestock Management	
or ANSC 605	Poultry Production and Health Management	
or ANSC 427	Introduction to Equine Science	
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
ENGL 401	First-Year Writing	4
PAUL 450	Personal Finance (or other Quantitative Reasoning Discovery)	4
VTEC 435	Animal Health and Laboratory Diagnostics	4
Discovery Social Science		4
Discovery Course		4
Electives [2]		13
Total Credits		**64**

20 credits of Discovery courses are required, including Writing Skills (ENGL 401 First-Year Writing), Biological Science (VTEC 435 Animal Health and Laboratory Diagnostics), Quantitative Reasoning (PAUL 450 Personal Finance or other), Social Science, and Discovery elective.

1. Students that wish to take ANSC 698 Cooperative for Real Education in Agricultural Management (CREAM) must take ANSC 425 Introduction to Dairy Herd Management in their first semester. CREAM is a two semester course (fall/spring).
2. Students without large animal experience are encouraged to enroll in AAS 421 Large Animal Behavior and Handling Techniques, as an elective.

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ANSC 421	Introduction to Animal Science	4
ENGL 401	First-Year Writing (DISC)	4
VTEC 435	Animal Health and Laboratory Diagnostics	4
Discovery or AAS 425 [1]		4
	Credits	**16**
Spring		
AAS 423	Dairy Selection	2
AAS 434	Equipment and Facilities Management	3
ADMN 400	Introduction to Business	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
Discovery Course - Social Science		4
	Credits	**17**
Second Year		
Fall		
AAS 432	Introduction to Forage and Grassland Management	3
AAS 597	Applied Animal Science Work Experience	0
ANSC 427 or ANSC 605 or ANSC 698	Introduction to Equine Science or Poultry Production and Health Management or Cooperative for Real Education in Agricultural Management (CREAM)	4
Discovery Course: Quantitative Reasoning, PAUL 450 or other		4
Discovery		4
Elective		2
	Credits	**17**
Spring		
ANSC 406	Careers in Animal Science	1
ANSC 543	Technical Writing in Animal Sciences	2
ANSC 548	Agricultural Business Management	4
ANSC 698 or ANSC 603	Cooperative for Real Education in Agricultural Management (CREAM) or Introduction to Livestock Management	4
Elective or Discovery if AAS 425 was taken Freshman year [1]		3
	Credits	**14**
	Total Credits	**64**

1 CREAM must be taken both fall and spring semesters

2 20 credits of Discovery required; including ENGL 401 First-Year Writing, VTEC 435 Animal Health and Laboratory Diagnostics, a Quantitative Reasoning course, a Social Sciences course, and 1 other Discovery course

Student Learning Outcomes

Program Learning Outcomes

- Students will be able to describe the significance and unique characteristics of animal agriculture in New England, including species and breeds most appropriate for various agricultural enterprises.
- Students will demonstrate they can handle and restrain a variety of domestic animals for routine care, health management practices and training purposes.
- Students will be able to identify and describe the significant anatomical parts of and differences between horses, cattle, small ruminants and poultry.
- Students will understand the basis of disease, major pathogens causing disease, the techniques used in identifying parasites and pathogens, as well as keeping animals healthy through biosecurity measures.
- Students will gain an applied understanding of animal nutrition, animal selection and breeding and animal health practices through experiential coursework with dairy cattle, livestock and/or poultry.
- Students will be able to articulate the career opportunities available in the field of Animal Science.
- Students will be able to identify appropriate land, farm management strategies and forage crops in New England for farm animal feeding in the form of hay, silage and pasture.
- Students will demonstrate written and oral communication skills necessary for marketing animal products and services, information transfer, and animal related business development and promotion.
- Finally, students will demonstrate through the development of an animal related business plan that they understand the importance of market analysis, product promotion, sales techniques, labor management, financial statements, insurance and labor management.

Veterinary Technology (VTEC)

The Veterinary Technology program provides students with a broad understanding of veterinary medicine and the role of animals in society. Through instruction in the knowledge and methods of veterinary technology, students develop the skills needed to become veterinary technicians who are strong advocates for animals, deliver compassionate and accurate care, act professionally in their decisions and judgment, and value lifelong learning and self-improvement.

https://colsa.unh.edu/thompson-school-applied-science

Programs

- Veterinary Technology (A.A.S.) (p. 744)

Faculty

Thompson School of Applied Science Faculty

Veterinary Technology (A.A.S.)

https://www.unh.edu/program/associate-applied-science/veterinary-technology

Description

The primary goal of the Veterinary Technology program is to equip students with exceptional technical, clinical reasoning, and professional skills that prepare graduates to successfully pass the Veterinary Technician National Exam (VTNE) and to become immediate and valuable members of the veterinary medical team. The program emphasizes both

farm animal and companion animal veterinary practice and includes coursework in basic sciences, veterinary nursing, and veterinary practice management. A strong focus on hands-on, practical learning is woven throughout the curriculum. Students gain foundational knowledge and technical skills related to major domestic animal species, including dogs, cats, horses, and cattle. Integrated instruction in communication, veterinary ethical and legal considerations, clinical reasoning, and technical competencies prepares graduates to provide high-quality, compassionate, and expert care for both small and large animals.

Practical learning experience is provided at the PAWS Veterinary Teaching Clinic, the UNH Equine Facilities and the Thomas P. Fairchild Dairy Teaching and Research Center. The program has a number of animal-related educational partnerships, including those with the New Hampshire SPCA in Stratham, N.H.

The program is accredited by the American Veterinary Medical Association (AVMA). Students who graduate from an accredited program are eligible to take the Veterinary Technician National Exam (VTNE) and pursue credentialing.

Admissions Requirements

Applicants to the Veterinary Technology program must have completed four years of college-preparatory English and a minimum of three years each of social sciences, college-preparatory mathematics, and college-preparatory sciences. At least two of the science courses must be college-preparatory biology and chemistry with laboratory components. Prior experience working with animals in a professional setting is strongly recommended, and applicants should include a statement in their application describing this experience. Successful applicants typically have a minimum cumulative GPA of 3.0 on a 4.0 scale.

Requirements

Degree Requirements

Minimum Credit Requirement: 64 credits

Minimum Residency Requirement: 16 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery Program

Major, Option, and Elective Requirements as indicated.
**Major GPA requirements as indicated.*

Veterinary Technology Requirements

Students must demonstrate all of the following for retention in and completion of the veterinary technology program:

1. Courses must be completed in proper sequence, according to pre-requisites listed in the course catalog.
2. To progress in the program, students must:
   a. Earn a minimum of 70% on their exam average in each VTEC course.
   b. Earn a minimum of 80% on their skills grades in VTEC 579 and VTEC 580.
   c. Receive a minimum grade of C+ (2.33 grade point) or better in all required AAS and VTEC courses.
3. Students who fail to meet retention requirements after 3 semesters will not be allowed to progress further in the program until retention requirements have been met.
   a. Students are allowed to repeat any major course once. If the student does not meet the grade standard on the retake, they must repeat the class again before taking other major courses.
   b. Students are allowed to repeat no more than two major courses.
   c. Students who fail to meet program grade standards in a third course will not be allowed to proceed in the program.
4. Students must maintain a 2.5 GPA in major courses to take additional courses in major.
5. Students must have a minimum cumulative 2.5 GPA in major to qualify for graduation from the program.
6. Students must successfully complete all required skills listed in the Veterinary Technology Essential and Recommended Skills List developed by the AVMA (the accrediting body for this program).
7. All coursework in the veterinary technology curriculum should be completed within five years of initial program enrollment. If this cannot be accomplished, the student may be required to reapply to the program for a new admission status and all veterinary technology specific courses may have to be repeated.

Students must show proof of pre-exposure rabies immunization or adequate rabies titer prior to enrollment in the program. Transportation is provided to students for practicum coursework. Students are responsible for providing their own transportation during internship experiences.

Code	Title	Credits
Required Courses		
AAS 421	Large Animal Behavior and Handling Techniques	2
ANSC 511	Animal Anatomy and Physiology I	4
ANSC 512	Animal Anatomy and Physiology II	4
VTEC 424	Introduction to Veterinary Technology	2
VTEC 430	Companion Animal Behavior and Handling Techniques	4
VTEC 435	Animal Health and Laboratory Diagnostics	4
VTEC 449	Clinical Animal Nursing Techniques I	4
VTEC 497	Veterinary Technology Work Experience	0
VTEC 550	Clinical Animal Nursing Techniques II	4
VTEC 565	Pharmacology for Veterinary Technicians	4
VTEC 575	Veterinary Anesthesia and Surgical Assisting	4
VTEC 579	Small Animal Practicum I	4
VTEC 580	Small Animal Practicum II	4
VTEC 583	Large Animal Practicum	2
VTEC 595	Veterinary Technology Internship	3
VTEC 599	Comprehensive VTNE Review	4
Select one of the following:		4
CHEM 411	Introductory Chemistry for Life Sciences	
CHEM 403	General Chemistry I (Recommended for students pursuing ANSC 2+2 articulation)	
Total Credits		**57**

Discovery Program Requirements

Students must complete 20 credits within the Discovery program; with at least one course in the following categories: Writing Skills, Quantitative Reasoning, Biological Science, Physical Science, and Social Science.

Code	Title	Credits
Writing Skills - Required Course		
ENGL 401	First-Year Writing	4
Biological Science - Required Course		
VTEC 435	Animal Health and Laboratory Diagnostics	4
Physical Science - Required Course		
Select one of the following:		4
CHEM 411	Introductory Chemistry for Life Sciences	
CHEM 403	General Chemistry I (Recommended for students pursuing ANSC 2+2 articulation)	

Quantitative Reasoning Recommendations		
Select one of the following:		4
BIOL 528	Applied Biostatistics I (Recommended for students pursuing ANSC 2+2 articulation)	
MATH 420	Finite Mathematics	
MATH 439	Statistical Discovery for Everyone	
PAUL 450	Personal Finance	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	
Social Science Category Recommendations		
Select one of the following:		4
NURS 535	Death and Dying	
OT 520	Happy and Healthy at Work: Promoting Wellness, Diversity and Inclusion	
PSYC 401	Introduction to Psychology	
SOC 400	Introductory Sociology	
SOC 450	Contemporary Social Problems	
SW 550	Human Behavior and Social Environment I	
SW 551	Human Behavior and Social Environment II	

Degree Plan

Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

First Year		
Fall		**Credits**
ANSC 511	Animal Anatomy and Physiology I	4
Chemistry course		4
ENGL 401	First-Year Writing	4
VTEC 424	Introduction to Veterinary Technology	2
VTEC 435	Animal Health and Laboratory Diagnostics	4
	Credits	**18**
Spring		
ANSC 512	Animal Anatomy and Physiology II	4
VTEC 430	Companion Animal Behavior and Handling Techniques	4
VTEC 449	Clinical Animal Nursing Techniques I	4
VTEC 565	Pharmacology for Veterinary Technicians	4
	Credits	**16**
Second Year		
Fall		
AAS 421	Large Animal Behavior and Handling Techniques	2
VTEC 497	Veterinary Technology Work Experience	0
VTEC 550	Clinical Animal Nursing Techniques II	4
VTEC 575	Veterinary Anesthesia and Surgical Assisting	4
VTEC 579	Small Animal Practicum I	4
Quantitative Reasoning		4
	Credits	**18**
Spring		
VTEC 580	Small Animal Practicum II	4
VTEC 583	Large Animal Practicum	2
VTEC 595	Veterinary Technology Internship	3
VTEC 599	Comprehensive VTNE Review	4
Social Science		4
	Credits	**17**
	Total Credits	**69**

Student Learning Outcomes

Program Learning Outcomes

- The primary goal of the veterinary technology program is to provide students with exceptional technical and clinical reasoning skills and knowledge in veterinary technology such that graduates will be prepared to pass the Veterinary Technician National Exam (VTNE) and to be immediate and valuable members of a veterinary medical team. Additionally, the program aims to develop a firm foundation in both farm animal and companion animal veterinary practices. Courses in the program cover basic sciences, veterinary nursing, and veterinary practice management, with a strong focus on hands-on practical knowledge throughout the curriculum. Students gain basic knowledge and skills for the major domestic animal species (dog, cat, horse, and cow). Integration of knowledge in communication, veterinary ethical and legal issues, veterinary practice management, clinical reasoning skills, and hands-on technical skills allow students to become complete veterinary technicians, capable of providing high-quality, compassionate, and expert care to animals both small and large.
- Specific skills and decision making abilities are outlined by the American Veterinary Medical Association (AVMA) accrediting body.

Disclosures

Veterinary Technology (A.A.S.)

Location/Delivery: Thompson School of Applied Science, Durham Campus [In-Person Program]

This program is designed to prepare graduates for professional licensure/certification as follows:

Veterinary Technician

Veterinary Technician National Examination (VTNE)

*The University of New Hampshire has determined this program **meets** the educational requirements for licensure/certification in:*[1]
Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Northern Mariana Islands, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Republic of Palau, Republic of the Marshall Islands, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

State contact information.

Additional information and related resources are available on the Registrar's Office website.

[1] State specific post-education requirements are subject to change. Students are responsible for confirming these requirements in their state of residence and intended practice.

Continuing Education

Continuing education provides public access to higher education for individuals not formally admitted to a UNH degree program. Taking courses as a non-degree student is an excellent way to prepare for matriculation into a degree program, help advance or change careers or study a topic of interest.

Course Enrollment

Eligibility Requirements

The University does not require students to apply for admission to enroll in courses as a continuing education non-degree student. Students must meet the following eligibility requirements:

Undergraduate Courses

Students registering for undergraduate courses (numbered 200-799) must meet the following eligibility requirements:

- A high school diploma or equivalent (GED)
- Demonstrated successful academic performance
- Completed all course prerequisites
- Not currently under disciplinary sanctions from UNH Durham/ Manchester, another college or university, or court-ordered probation or other sanctions.

Graduate Courses

Students registering for graduate courses (numbered 800-999) must meet the eligibility requirements above and have a bachelor's degree. Graduate coursework is advanced study and presumes completion of adequate preparation at the undergraduate level in the same or allied field in which the student wishes to pursue graduate coursework.

Internships

Continuing education students are not permitted to register for internships through UNH.

Prerequisites

Individuals are responsible for meeting all course prerequisites before registering for classes. Prerequisite information is included in undergraduate and graduate course descriptions.

The University reserves the right to restrict registration to those who cannot demonstrate the completion of the above eligibility requirements and to bar registration or withdraw a student who upon request fails to provide proper documentation or who demonstrates unacceptable academic performance once enrolled.

Registration

Continuing education student course registration opens as follows:

- **Fall Semester** – Opens in July
- **January Term** – Opens in October
- **Spring Semester** – Opens in December
- **Summer Session** – Opens in March

Important Dates and Deadlines

A comprehensive calendar with dates and deadlines for add/drop, refunds, registration, withdrawal and more information can be found on the University Master Academic Calendar.

New Students

New Continuing Education students must complete the Continuing Education Registration Request form to register for first time and will be set up with a UNH student account.

Returning Students

Returning students who have taken a continuing education course within the last year can use their existing UNH student account to log into Webcat and register for courses when registration is open.

If it has been over a year since you last registered for a continuing education course or you're a returning UNH alumni, you will need to complete the Continuing Education Registration Request form to re-activate your UNH student account.

Payment in full (tuition & fees) is due at the time of registration. Non-payment will result in the student being dropped from courses.

Credit Load Policies

Undergraduate Non-Degree Students

Fall/Spring Semester

Non-degree students may register for a maximum of 19 credits.
**Students will be subject to full tuition and fees if registered for 12 or more credits.*

Summer Session

Non-degree students may register for a maximum of 12 credits.
**Petitions (p. 16) for an exception must be approved by the Academic Standards and Advising Committee.*

January Term

Non-degree students are limited to one course for a maximum of 4 credits.

A non-degree student not actively enrolled in courses for one year will be inactivated. Inactivated students may visit the UNH Continuing Education website for more information about returning.

Graduate non-degree students

Graduate courses (numbered 800-999) are open to individuals with a baccalaureate degree from an accredited college or university.

Fall/Spring Semester

Non-degree students may register for a maximum of 16 credits.

**Students will be subject to full tuition and fees if registered for 9 or more credits.*

Summer Session

Non-degree students do not have a credit maximum

January Term

Non-degree students are limited to one course for a maximum of 4 credits

A non-degree student not actively enrolled in courses for one year will be inactivated. Inactivated students may visit the UNH Continuing Education website for more information about returning.

Tuition and Fees

Tuition for continuing education students varies depending on the course campus, credits per course, and student residency. For current per credit hour tuition rates see the UNH Student Accounts website.

Continuing education students may also be subject to mandatory fees for registration, student services, technology, and special course fees. Fees are posted to student's Webcat account within 72 hours of registration. See more information about how to use Webcat. Payment is required within one week of registration to avoid being unregistered.

NH Senior Citizen Tuition Waiver

New Hampshire residents who are age 65 or older and are not enrolled in a degree program are eligible to take a maximum of two credit-bearing courses (some exceptions apply) per fiscal year (Summer Session/Fall/January Term/Spring) tuition-free.

Registration begins on the first day of continuing education registration each semester. Complete the following steps prior to registering:

- Provide a copy of NH State Driver's License and a completed Waiver Agreement Form to Business Services.
- Review the course schedule for additional permissions required prior to registration.
- Students interested in auditing a course must complete an Audit Course Form (instructor signature required).

Additional Information

- Registration is on a space-available basis.
- Prospective students must be 65 years of age as of the first day of the course.
- Waivers will only be granted at the time of registration (not retroactively).
- Non-credit courses, workshops, etc. are not covered by the tuition waiver.

* Certain credit-bearing courses offered at UNH but administered by other institutions (such as Isles of Shoals and Library Science courses) are not covered by the tuition waiver.

Capacity is limited in all UNH academic courses and enrollment is first come, first serve, with no guarantee of availability or acceptance.

All scholarships and waivers used to cover tuition, fees, books, supplies, and equipment may have tax implications. If you have any questions about potential tax implications, please consult a tax advisor.

Financial Aid

Continuing education students are not eligible to receive federal financial aid or scholarships for enrollment expenses, unless they are enrolled in an approved degree or certificate program. For more information visit the UNH Financial Aid Office.

Transfer Credit and Articulation

UNH cannot guarantee that earned credits will be valid towards all matriculated degree and certificate programs at UNH, will transfer to other universities, or will be accepted for credit from other universities.

Continuing education students should discuss credit articulation with the department they would like to transfer credit to prior to starting any coursework.

Resources and Services

Upon successful course enrollment, nondegree students will receive more information about additional services needed to participate in course work and accessing campus resources such as obtaining a UNH student ID, visiting campus, and accessing courses online.

- **Parking:** Explore Commuter parking pass options, campus parking maps, visitor parking, and more.
- **Dining**: View UNH's dining options, or visit the Campus Services Office to purchase a community member meal plan.
- **Student ID:** Request a UNH Student ID to use at the library, for Wildcat Transit Buses, and more.
- **Transcript Requests:** UNH non degree continuing education students can request their academic transcript through the Office of the Registrar.

Policies and Regulations

University of New Hampshire non-degree continuing education students are responsible to review and adhere to the rules and regulations governing the university.

- Academic Policies
- Student Rights, Rules and Responsibilities
- USNH Policy Manual
- Family Educational Rights and Privacy Act (FERPA)

Academic Standards and Expectations

At the University New Hampshire a cumulative grade-point average of 2.00 (C grade) is the minimum acceptable level for undergraduate work and 2.67 (B- grade) is the minimum acceptable level for graduate work at the University. The records of non-degree students are examined periodically and academically deficient students may be warned or excluded from registering.

Programs

CATS Program

The **CATS (Challenging Academically Talented Students) Program** is open to highly motivated and academically strong high school juniors and seniors who want to enrich their academic experience with a college-level course. Students may choose from freshman-level courses (400-500 numbered courses).

Pre-Admission Program

The **Pre-Admission Program** allows students an opportunity to strengthen their academic credentials in preparation for admission to a baccalaureate program by completing coursework that satisfies both general education and introductory-level major requirements. Students complete two semesters in the program, register for up to 12 credits per semester, and then transfer to a baccalaureate program upon successful completion of the outlined criteria.

Professional Development and Training

Professional Development & Training is a unit of UNH's Office of Outreach and Engagement and serves individuals, businesses, and organizations by offering a wide range of non-credit professional development opportunities throughout the year. Programs are designed to assist professionals in developing new or advanced knowledge and skills in a variety of fields.

Summer Session

Summer Session provides a wide range of credit courses, institutes, and programs in a variety of term lengths from May to August. From youth-enrichment programs to advanced-level institutes, Summer Session

provides educational opportunities for learners of all ages. On-campus housing is available for students enrolled in summer credit courses. Summer credit courses are held to the same academic standards as regular term courses but are typically offered at an accelerated pace.

January Term

January Term is a three-week learning opportunity held during winter break. Online, on-campus, and study-away credit courses are available in a variety of academic disciplines at both the undergraduate and graduate levels. Because of the intensive course of study, students may register for only one course during January Term.

Contact Information

If you have any questions about enrolling in continuing education courses at the University of New Hampshire, contact UNH Online & Continuing Education (non.degree@unh.edu).

https://www.unh.edu/continuingeducation/

Course Descriptions

A

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- Accounting (ACCT) CPSO (p. 754)
- Administration (ADMN) (p. 756)
- Aerospace Studies (AERO) (p. 758)
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Accounting (ACC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ACC 501 - Survey of Accounting
Credits: 4
Survey of basic accounting concepts, including exposure to financial statements, accounting processes, decision making, and budgeting. This course is designed for students pursuing a Business Administration minor, a minor in Accounting and Financial Information or exploring basic accounting. Not for Paul College Business Administration students.
Equivalent(s): ACFI 501, ADMN 502
Grade Mode: Letter Grading

ACC 520 - Topics in Accounting
Credits: 4
Special Topics in Accounting, vary by semester.
Prerequisite(s): ACC 501 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 16 credits. May be repeated up to 3 times.
Grade Mode: Letter Grading

ACC 620 - Topics in Accounting
Credits: 4
Special Topics in Accounting, topics vary by semester.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

ACC 621 - Intermediate Financial Accounting I
Credits: 4
Examination of the nature and applicability of accounting theory and the conceptual framework of accounting. Development of the capacity to address and resolve issues and problems in financial reporting. Topics include financial statements, revenue recognition, and accounting for assets.
Prerequisite(s): ADMN 502 with a minimum grade of C- or ACC 520 with a minimum grade of C-.
Equivalent(s): ACC 721, ACFI 621
Grade Mode: Letter Grading

ACC 622 - Intermediate Financial Accounting II
Credits: 4
Selected topics within financial reporting such as accounting for leases, pensions, stock options, and deferred taxes. Focus on how and why these issues are accounted for in the manner prescribed by current GAAP.
Prerequisite(s): ACC 621 with a minimum grade of C- or ACFI 621 with a minimum grade of C- or ACC 721 with a minimum grade of C-.
Equivalent(s): ACC 722, ACFI 622
Grade Mode: Letter Grading

ACC 623 - Advanced Managerial Accounting
Credits: 4
Builds on the basic managerial accounting course by continuing the theme of accounting as a management tool. Emphasis is on cost accounting as a source of data for measuring and improving the economic condition of the enterprise. Newly evolving management themes are integrated into the traditional topics of planning and control, cost analysis, overhead allocation, transfer pricing, and decision modeling.
Prerequisite(s): ADMN 503 with a minimum grade of C- or ACC 520 with a minimum grade of C-.
Equivalent(s): ACC 723, ACFI 723
Grade Mode: Letter Grading

ACC 626 - Introduction to Federal Taxation
Credits: 4
Federal Income tax concepts and law applicable to individuals. Coverage includes taxable income and deductions, passive activities, alternative minimum tax, property transactions, and compensation.
Prerequisite(s): ADMN 502 with a minimum grade of C- or ACC 520 with a minimum grade of C-.
Equivalent(s): ACC 726, ACFI 726
Grade Mode: Letter Grading

ACC 627 - Financial Statement Analysis
Credits: 4
Methods and tools of analysis and interpretation of financial statement data. Use of financial information in a variety of decision making situations including a prediction of corporate earnings, debt ratings, and financial distress; lending decisions; risk analysis; and equity valuations.
Prerequisite(s): ACC 621 (may be taken concurrently) with a minimum grade of C- or ACC 721 (may be taken concurrently) with a minimum grade of C- or ACFI 721 (may be taken concurrently) with a minimum grade of C-.
Equivalent(s): ACC 727, ACFI 725
Grade Mode: Letter Grading

ACC 720 - Topics in Accounting
Credits: 4
Special Topics in Accounting, vary by semester.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

ACC 724 - Auditing
Credits: 4
Philosophy and environment of auditing, with attention to an understanding of the major auditing concepts and objectives and its judgement process. Emphasis on the nature and economic purpose of audits, standards, professional ethics, auditors' legal liability, internal control, and audit evidence. Includes audit procedures, reports, and computer software.
Attributes: Writing Intensive Course
Prerequisite(s): ACFI 621 (may be taken concurrently) with a minimum grade of C- or ACC 721 (may be taken concurrently) with a minimum grade of C- or ACC 621 (may be taken concurrently) with a minimum grade of C-.
Equivalent(s): ACFI 724
Grade Mode: Letter Grading

ACC 725 - Independent Studies in Accounting
Credits: 1-4
Student-designed individual research projects, approved by a faculty sponsor. Paper required. Course credits vary according to the nature of the project, to be determined by the faculty sponsor. Seniors in high standing; by permission.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

ACC 747 - Business Law
Credits: 4
This course will introduce students to various legal issues interact with and impact business decision making. Topics include a majority of the legal principles tested within the REG section of the CPA exam: professional responsibility and fiduciary obligations, contract formation and performance, agency and third-party relationships, secured transactions, Uniform Commercial Code and sale of goods, negligence and professional malpractice, business entity format, formation and management. Other topics include intentional and negligent torts, the civil process of modern legal proceedings, overview of the U.S. Constitution, general civil and criminal liability. Historical and current legal cases will be addressed with an emphasis on developing skills in identifying, presenting, and discussing all sides of a legal argument.
Equivalent(s): MGT 747
Grade Mode: Letter Grading

ACC 751 - Forensic Accounting and Fraud Examination
Credits: 4
This course builds on audit coursework, but is not limited to an audit perspective. It covers the major schemes used to defraud organizations and individuals. Students develop skills in the areas of fraud protection, detection, analysis, and skills relating to investigations.
Prerequisite(s): ACC 724 with a minimum grade of C-.
Grade Mode: Letter Grading

ACC 795 - Internship in Accounting
Credits: 1-8
Accounting fieldwork in a business or other type of organization. Supervision is provided by the organization, and consultation is provided by the faculty sponsor. Written report required. Course credits vary according to the nature of the fieldwork and hours worked; to be determined by the faculty sponsor. Juniors and seniors in high standing; by permission.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Credit/Fail Grading

ACC 799 - Honors Thesis in Accounting
Credits: 4-8
Supervised research leading to the completion of an honors thesis or project in accounting; required for graduation from the honors program in administration for students in the accounting option. Permission of director of undergraduate programs and Accounting and Finance department chair.
Attributes: Honors course
Grade Mode: Letter Grading

Accounting (ACCT) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ACCT 532 - Financial Accounting
Credits: 4
This course provides a study and overview of accounting theory, practice, issues, and objectives. The course focuses on the proper interpretation of financial information to understand the financial condition of any type of organization. The course may cover the nature, function, and environment of accounting, the basic accounting statements, and key financial accounting ratios. Excel proficiency is expected prior to enrollment in this course. Students should consider completing CMPL 402 Excel if they have not completed an Excel course in transfer.
Prerequisite(s): MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D-.
Equivalent(s): ACCT 511G, MGMT 511G
Mutual Exclusion: No credit for students who have taken BUS 532.
Grade Mode: Letter Grading

ACCT 533 - Managerial Accounting
Credits: 4
This course builds upon fundamental knowledge developed in ACCT 532 Financial Accounting. Students apply the concepts and methods of managerial accounting. Students will learn the differences between variable, fixed and mixed costs. Fundamental ethical principles of accounting as applied in real-world situations will be examined. Topics may include the business environment, cost concepts and classifications, job-order costing, process costing, cost behavior, relationships to volume and profits, variable costing, activity based costing, profit planning, standard costs, relevant costs, applications of differential cost analysis, cash flows, and economic value added.
Prerequisite(s): (MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D- or MGMT 566 with a minimum grade of D- or MGMT 566G with a minimum grade of D-) and (ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D-).
Equivalent(s): ACCT 515G, MGMT 510G
Mutual Exclusion: No credit for students who have taken BUS 533.
Grade Mode: Letter Grading

ACCT 550 - Accounting Information Systems
Credits: 4
Accountants use, evaluate, and control information systems as a core dimension of their work with financial data. Information systems shape the capture, processing, and communication of accounting data in organizations. This course provides a thorough introduction to the ways that accounting and information systems intersect. Students may explore both the conceptual and the practical aspects of accounting information systems, including effective communication of information systems needs, the design and development of such systems, and the evaluation of their effectiveness. The dimensions of security, controls, and auditing may be addressed.
Prerequisite(s): ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D-.
Equivalent(s): ACCT 550G
Grade Mode: Letter Grading

ACCT 600 - Intermediate Accounting I
Credits: 4
In this course, students expand their understanding of the accounting process and of reporting. Students will demonstrate how depreciation, impairments, and depletion are relevant to business operations and management decision making. The course builds the conceptual framework for generally accepted accounting principles, which may cover the accounting cycle, net income, financial statement preparation, measuring equity, current assets including cash, receivables, and inventories, as well as depreciation, impairments, and depletion.
Prerequisite(s): (ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D-) and (ACCT 533 with a minimum grade of D- or ACCT 515G with a minimum grade of D- or MGMT 510G with a minimum grade of D-).
Equivalent(s): ACCT 600G
Grade Mode: Letter Grading

ACCT 601 - Intermediate Accounting II
Credits: 4
In the second half of the intermediate accounting sequence, students may develop a greater understanding of the principles that dictate accounting applications and will apply those principles in increasingly advanced scenarios. Students will apply accounting principles to the development of individual pensions, employee benefit plans, shareholders equity, and the disposition of operational assets. The course also places emphasis on developing advanced spreadsheet techniques and research capabilities.
Prerequisite(s): (ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D-) and (ACCT 533 with a minimum grade of D- or ACCT 515G with a minimum grade of D- or MGMT 510G with a minimum grade of D-) and (ACCT 600 with a minimum grade of D- or ACCT 600G with a minimum grade of D-).
Equivalent(s): ACCT 601G
Grade Mode: Letter Grading

ACCT 629 - Cost Accounting
Credits: 4
This course covers cost and management accounting environments and various cost management systems which contribute to financial decisions. Students may apply general principles of activity-based cost systems, capital budgeting, and financial management to the financial objectives of an organization. The course helps students develop and use short and long-term organizational performance measures to determine organizational needs.
Prerequisite(s): (ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D-) and (ACCT 533 with a minimum grade of D- or ACCT 515G with a minimum grade of D- or MGMT 510G with a minimum grade of D-) and (FNC 665 with a minimum grade of D- or MGMT 613G with a minimum grade of D-).
Equivalent(s): ACCT 610G
Grade Mode: Letter Grading

ACCT 635 - Taxation
Credits: 4
This is an introductory course in Federal income tax law relating to individuals and businesses, including proprietorship, partnership and corporation. Topics may include gross income, deductions, losses, tax credits, property transactions, deferred compensation, tax planning and preparation of tax returns.
Prerequisite(s): (ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D-) and (ACCT 533 with a minimum grade of D- or ACCT 515G with a minimum grade of D- or MGMT 510G with a minimum grade of D-) and (ACCT 600 with a minimum grade of D- or ACCT 600G with a minimum grade of D-) and (ACCT 601 with a minimum grade of D- or ACCT 601G with a minimum grade of D-).
Equivalent(s): ACCT 612G
Grade Mode: Letter Grading

ACCT 705 - Advanced Accounting
Credits: 4
This course is designed to familiarize students with advanced accounting concepts such as foreign currency translations, accounting for consolidations, and partnerships. Students will practice accurately and appropriately journalizing transactions related to these and other advanced accounting scenarios, such as liquidation and reorganization according to GAAP standards. Upon completion of this course, students may articulate why businesses might use such strategies, as well as how to conduct accounting ethically in complex accounting situations.
Prerequisite(s): ACCT 601 with a minimum grade of D- or ACCT 601G with a minimum grade of D-.
Equivalent(s): ACCT 602G
Grade Mode: Letter Grading

ACCT 710 - Governmental and Not-For-Profit Accounting
Credits: 4
The purpose of this course is to familiarize students with the basic differences between accounting for profit-driven entities and accounting for governmental or not-for-profit organizations. The course will help students distinguish how fund accounting for governmental entities operates, including the general fund, capital projects fund, and special revenue fund. Students may learn to identify and implement best practices in accounting within governmental or not-for-profit organizations, in keeping with the regulatory and ethical context of such practices.
Prerequisite(s): ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D-.
Equivalent(s): ACCT 603G
Grade Mode: Letter Grading

ACCT 720 - Auditing
Credits: 4
This course focuses on the principles and practice of investigating a business's financial statements and supporting financial documents. Students will interpret and explain the roles, responsibilities, procedures, ethical codes, and legal environment of the auditor in business operations according to Generally Accepted Auditing Standards (GAAS). Topics may include roles and responsibilities of the auditor, types of audits, auditing standards, internal control and professional ethics.
Prerequisite(s): (ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D-) and (ACCT 533 with a minimum grade of D- or ACCT 515G with a minimum grade of D- or MGMT 510G with a minimum grade of D-) and (ACCT 600 with a minimum grade of D- or ACCT 600G with a minimum grade of D-) and (ACCT 601 with a minimum grade of D- or ACCT 601G with a minimum grade of D-).
Equivalent(s): ACCT 615G
Grade Mode: Letter Grading

ACCT 730 - Advanced Data Analytics for Accounting Professionals
Credits: 4
In this course, students will learn the tools and skills necessary to successfully perform data analytics and provide data-driven insights and recommendations. Students will be exposed to both a Microsoft track (Excel, Power Pivot, and Power BI) and a Tableau track (Tableau Prep and Tableau Desktop). Using multiple tools allows students to learn which tool is best suited for the necessary data analysis, data visualization, and communication of the insights gained. Students should leave this course with the skills necessary to translate accounting and business problems into actionable proposals that they can competently present to internal and external stakeholders.
Prerequisite(s): ACCT 550 with a minimum grade of D- or ACCT 550G with a minimum grade of D-.
Grade Mode: Letter Grading

Administration (ADMN)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ADMN 400 - Introduction to Business
Credits: 0 or 4
This course will introduce students to business organizations, the business disciplines and critical issues in contemporary business. The priority will be in having students develop strong intellectual foundations in business, knowledge of core disciplines of business, and an awareness of businesses' role in the economy and in the larger society. The course will include once a week lectures and also small group discussion sessions. The lectures will be organized by the lead PAUL faculty person and include visits and discussions with executives from New Hampshire companies.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ADMN 401W - Introduction to Responsible Business Management
Credits: 4
Students will learn the importance of, and be exposed to, responsible business management practices that need to be applied throughout an organization (e.g., Human Resources, Finance, Accounting, Marketing) to maximize economic performance and ensure ethical conduct. In this course, students will be introduced to foundational concepts in ethics and sustainability, along with inclusion, diversity, equity, and accessibility (IDEA) as pillars of responsible business management and economic performance. Students will explore the ethical dimensions of business decisions, the role of sustainability in management practices, and the importance of fostering inclusive, accessible organizational cultures as foundational to organizational success. This course emphasizes the value of multiple perspectives, critical thinking, innovation, oral and written expression, presentation, and reflection.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ADMN 403 - Computing Essentials for Business
Credits: 0 or 1
Self-paced course covering the fundamental skills and proficiency of general business software applications. Topics will include word processing and spreadsheet applications.
Grade Mode: Credit/Fail Grading

ADMN 410 - Management Information Systems
Credits: 0 or 4
This course provides an introduction to computer literacy, basic computer hardware and software concepts, business applications of information technology and computer ethics. Hands-on exercises include spreadsheets, databases and web pages. Students registering for this course are expected to be able to bring a laptop computer to each class session running the Windows version of Microsoft Office Professional (including Microsoft Access).
Prerequisite(s): ADMN 403 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

ADMN 502 - Financial Accounting
Credits: 4
Fundamentals of financial accounting concepts and procedures for analyzing economic events and the preparation and use of financial statements.
Equivalent(s): ACC 501, ACFI 501
Grade Mode: Letter Grading

ADMN 503 - Managerial Accounting
Credits: 0 or 4
The use of information by managers to (1) determine the cost and profitability of the organization's products or services; (2) plan, control, and evaluate routine operations; and (3) make special non-routine decisions. The demand for managerial accounting information is derived from an integrated treatment of organizational objectives, an orientation to customers, and a focus on activities as the unit of analysis for measurement of cost, quality, and time.
Prerequisite(s): ADMN 502 with a minimum grade of C-.
Grade Mode: Letter Grading

ADMN 510 - Business Analytics and Statistics
Credits: 4
Introductory coverage of analytics and statistical methods for managerial decision-making: data usage and visualization, probability, descriptive and inferential statistics, and regression modeling. Quantitative techniques common to many introductory statistics courses are covered, but the emphasis is on understanding concepts such as uncertainty, inferences from sample data, and model formulation, with particular emphasis on utilizing data for decision-making.
Attributes: Quantitative Reasoning(Disc)
Prerequisite(s): ADMN 403 with a minimum grade of D- and (MATH 420 with a minimum grade of D- or MATH 422 with a minimum grade of D- or MATH 424A with a minimum grade of D- or MATH 424B with a minimum grade of D- or MATH 425 with a minimum grade of D-).
Equivalent(s): ADMN 420
Mutual Exclusion: No credit for students who have taken ADM 430, BIOL 528, BUS 430, EREC 525, HHS 540, HMP 540, MATH 439, MATH 539, MATH 644, PSYC 402, PSYC 402H, SOC 402, SOC 402H, SOC 502, SOC 502H.
Grade Mode: Letter Grading

ADMN 570 - Introduction to Financial Management
Credits: 4
The investments, financing, and dividend decisions of the firm in a global setting. Topics include capital budgeting, designing and issuing securities, manager performance evaluation, resolution of agency problems, and working capital management.
Prerequisite(s): (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C- or EREC 411 with a minimum grade of C-) and ADMN 510 (may be taken concurrently) with a minimum grade of C- and ADMN 502 (may be taken concurrently) with a minimum grade of C- and (ECON 402 (may be taken concurrently) with a minimum grade of C- or ECON 402H (may be taken concurrently) with a minimum grade of C-).
Grade Mode: Letter Grading

ADMN 575 - Behavior in Organizations
Credits: 4
Behavioral science concepts applied to work settings. Focus on understanding and analyzing individual beliefs, values, goals, perceptions, motivation, commitment, and decision making; group structures and processes (interpersonal skills, communication, conflict resolution, leadership, and team work); organizational control systems (rewards, task design, performance appraisal); outcomes (satisfaction and development of the person as well as the organization); and organizational change.
Attributes: Inquiry (Discovery); Writing Intensive Course
Prerequisite(s): (ADMN 400 with a minimum grade of C- or ADMN 401W with a minimum grade of C-) and ADMN 502 with a minimum grade of C-.
Equivalent(s): BUS 620
Mutual Exclusion: No credit for students who have taken MGT 535, MGT 580.
Grade Mode: Letter Grading

ADMN 580 - Quantitative Decision Making
Credits: 4
Introduction to the use of quantitative tools in the decision-making process of an organization. Planning and operational problems in the manufacturing and services sectors are emphasized. Topics include forecasting, capacity planning, optimization, project scheduling, simulation and risk analysis, quality, inventory management, and waiting lines.
Prerequisite(s): ADMN 420 with a minimum grade of C- or ADMN 510 with a minimum grade of C-.
Grade Mode: Letter Grading

ADMN 585 - Marketing
Credits: 4
Covers marketing as the process of planning and developing goods and services to satisfy the needs of target customers: consumers, other businesses, institutions. Focus on how marketing contributes to the firm's goals through product planning, pricing, promotion, and distribution policies, through both digital and traditional channels.
Prerequisite(s): (ADMN 400 with a minimum grade of C- or ADMN 401W with a minimum grade of C-) and (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C-).
Mutual Exclusion: No credit for students who have taken HMGT 600, MKTG 530, MKTG 550.
Grade Mode: Letter Grading

ADMN 700 - PAUL Assessment of Core Knowledge
Credits: 0
One of the learning objectives in the Business Administration Program is that all students will graduate with an understanding of these core knowledge assembled from the various disciplines that contribute courses to the program. We assess this learning as part of our Assurance of Learning Program. The zero credit course provides an administrative mechanism for accomplishing this goal.
Co-requisite: ADMN 775
Grade Mode: Credit/Fail Grading

ADMN 775 - Strategic Management: Decision Making
Credits: 4
Capstone course: Problem-solving, decision-making, and strategic thinking relative to managerial, economic, ethical, legal, political, social, and technological aspects of an organization's environment. Integrates the functional discipline skills within the role of the general manager as leader and chief strategist, organizational builder and doer. Case discussion and analysis, industry and competitive analysis, environmental scanning, industry simulation, strategic audit, stakeholder analysis, values, ethics and social issues management within the public policy process are important course components.
Co-requisite: ADMN 700
Prerequisite(s): ADMN 570 with a minimum grade of C- and ADMN 575 with a minimum grade of C- and ADMN 580 with a minimum grade of C- and ADMN 585 with a minimum grade of C-.
Equivalent(s): ADMN 703
Grade Mode: Letter Grading

ADMN 799 - Honors Thesis/Project
Credits: 4-8
Supervised research leading to the completion of an honors thesis or project; required for graduation from the honors program in administration.
Attributes: Honors course; Writing Intensive Course
Mutual Exclusion: No credit for students who have taken FIN 799H.
Grade Mode: Letter Grading

Aerospace Studies (AERO)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

AERO 301 - Leadership Laboratory
Credits: 0
Taken by all AFROTC cadets throughout enrollment in AFROTC. Command and staff leadership experiences in cadet corps. Air Force customs and courtesies, drill and ceremonies, career opportunities, and life and work of the junior officer. Student leadership potential developed in a practical, supervised laboratory.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Credit/Fail Grading

AERO 302 - AFROTC Physical Training
Credits: 0
Taken by all AFROTC cadets throughout enrollment in AFROTC. Prepares cadets to pass the Air Force Fitness Assessment by introducing a year-round physical conditioning program that emphasizes total fitness that includes proper aerobic conditioning, strength and flexibility training, and healthy eating. Command and staff leadership experiences, Air Force customs and courtesies, and the reinforcement of unit cohesion, military good order and discipline, and esprit de corps.
Co-requisite: AERO 301
Grade Mode: Credit/Fail Grading

AERO 415 - Heritage and Values of the United States Air Force I
Credits: 2
Heritage and Values of the United States Air Force I, is a survey course designed to introduce students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the Air Force.
Grade Mode: Letter Grading

AERO 416 - Heritage and Values of the United States Air Force II
Credits: 2
Heritage and Values of the United States Air Force II, is a survey course designed to introduce students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the Air Force. This is a continuation of AERO 415.
Grade Mode: Letter Grading

AERO 541 - Team and Leadership Fundamentals I
Credits: 2
Team and Leadership Fundamentals I, focuses on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership on a personal level and within a team. The courses will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer cadet.
Grade Mode: Letter Grading

AERO 542 - Team and Leadership Fundamentals II
Credits: 2
Team and Leadership Fundamentals II, focuses on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership on a personal level and within a team. The course will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer candidate. This is a continuation of AERO 541.
Grade Mode: Letter Grading

AERO 671 - Leading People and Effective Communication I
Credits: 4
Leading People and Effective Communication I, teaches cadets advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skills and communication. Cadets have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors.
Grade Mode: Letter Grading

AERO 672 - Leading People an Effective Communication II
Credits: 4
Leading People an Effective Communication II, teaches cadets advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skills and communication. Cadets have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors. This is a continuation of AERO 671.
Grade Mode: Letter Grading

AERO 681 - National Security Affairs/Preparation for Active Duty I
Credits: 4
National Security Affairs/Preparation for Active Duty I, is designed for college seniors an gives them the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. The final semester provides information that will prepare the cadets for Active Duty.
Grade Mode: Letter Grading

AERO 682 - National Security Affairs/Preparation for Active Duty II
Credits: 4
National Security Affairs/Preparation for Active Duty II, is designed for college seniors and gives them the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. The final semester provides information that will prepare the cadets for Active Duty. This is a continuation of AERO 681.
Grade Mode: Letter Grading

AERO 796 - AFROTC Internship
Credits: 1-4
This internship is an Air and Space Studies program which prepares students for careers as Air Force Officers by providing experiential learning in an AFROTC detachment. History or Political Science majors are preferred. The internship is supervised by an Air Force Officer.
Prerequisite(s): AERO 415 with a minimum grade of D- and AERO 416 with a minimum grade of D- and AERO 541 with a minimum grade of D- and AERO 542 with a minimum grade of D- and AERO 671 with a minimum grade of D- and AERO 672 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

Africana and American Studies (AFAM)

No courses are currently active in the course inventory for this subject prefix.

Agricultural Mechanization (AM)

No courses are currently active in the course inventory for this subject prefix.

Agriculture & Food Systems (AGFS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

AGFS 403 - Green Thumb Workshop
Credits: 2
The objective of this course is to instill a life-long appreciation for garden plants and the many aesthetic, therapeutic, and culinary roles they play in enhancing our lives and landscapes. This course emphasizes hands-on learning of key horticultural skills and techniques (e.g. garden design, propagation, pruning, plant breeding, and problem diagnosis), complemented by activities designed to bring the beauty and utility of plants to life (e.g. flower arranging, botanical drawing, dyeing, and tastings).
Equivalent(s): SAFS 403
Grade Mode: Letter Grading
Special Fee: Yes

AGFS 405 - Sustainable Agriculture and Food Production
Credits: 4
This course will introduce you to sustainable agriculture and the food system more broadly. We will explore the impacts of different food production systems, with an emphasis on those common in the United States. We will explore key issues and challenges facing sustainable agriculture and food systems, and you will learn how to explore primary research to dig deeply into the questions you care about. Throughout, we will consider the role you have in influencing our food system, either as a producer, consumer, educator, and/or policymaker.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): SAFS 405
Grade Mode: Letter Grading

AGFS 410 - A Taste of the Tropics
Credits: 4
This course will expose students to the exciting world of tropical agriculture and the ways that people in the tropics utilize a diverse array of food crops. Our lives as consumers in the developed world are touched by tropical products every single day. Whether it's the cinnamon in your tea, the vanilla in your cookies, the black pepper on your salad, or your cup of hot coffee, you likely consume tropical crops whether you know it or not. Ever stop to wonder where these items are from and how they are produced? We will examine agriculture and food culture throughout the tropical world's four principle areas: Latin America, Tropical Asia, Tropical Africa, and the South Pacific. Production systems ranging from large scale modern high input operations to home subsistence gardens are explored. Tropical crops are examined in five major groups: grains and legumes, starchy roots, exotic vegetables, tropical fruit, and herbs, spices, medicinal plants. Cultural uses of these crops throughout the tropical world are given special emphasis.
Attributes: World Cultures(Discovery)
Equivalent(s): SAFS 410
Grade Mode: Letter Grading

AGFS 415 - The Science of Fermentation: A Culinary Journey from Bread to Beer
Credits: 4
This course introduces students to the science, history, and global traditions of food and beverage fermentation. Students explore how microbes transform raw ingredients into flavorful, nutritious, and socially significant foods and drinks — from bread, cheese, and kimchi to beer, wine, and kombucha. Through case studies, tastings, and demonstrations, students gain an appreciation for fermentation's role in human culture and the biological principles behind it. Students will explore product scale-up, industry practices, and food safety through expert guest lectures. There is no age restriction to taking this course as we will not be consuming alcohol.
Attributes: Biological Science(Discovery)
Equivalent(s): SAFS 415
Grade Mode: Letter Grading

AGFS 421 - Introductory Horticulture
Credits: 0 or 4
This course will introduce the disciplines of plant science and horticulture. Students will learn the fundamentals of plant structure and how cells, tissues, organs and whole plants develop and function. Students will then explore how environmental factors affect growth and development, and how humans manipulate them to produce horticultural crops: fruits, vegetables, flowers and landscape plants. Labs are designed to emphasize and reinforce the principles covered in lecture and will give students a hands-on introduction to horticulture. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course
Equivalent(s): PLSC 421
Grade Mode: Letter Grading
Special Fee: Yes

AGFS 502 - Agroecology
Credits: 4
This course introduces students to the discipline and practice of agroecology, with an emphasis on relevant ecological theory within the context of production agriculture. Students are exposed to key ecological principles from population, community, and ecosystem ecology and agronomy. Students learn about the history and consequences of modern industrial agricultural systems and the need for more sustainable management practices that consider ecological interactions.
Equivalent(s): SAFS 502
Grade Mode: Letter Grading

AGFS 515 - Technical Brewing
Credits: 4
Technical brewing will focus on learning skills needed in the brewing industry. This hands-on class will focus on sensory, the brewing process, quality control, safety, and sanitation in the brew house. Must be 21 to enroll in the course.
Prerequisite(s): SAFS 415 with a minimum grade of D- or AGFS 415 with a minimum grade of D-.
Equivalent(s): SAFS 515
Grade Mode: Letter Grading
Special Fee: Yes

AGFS 601 - Fruit Crop Production
Credits: 4
Fruit crops represent an important component of both our dietary needs and our agricultural production systems. This course explores the origin, distribution, botany, physiology, and culture of fruit crops. Emphasis will be given to temperate fruit crops adapted to New England growing conditions. The course also explores integrating fruit crops into landscapes, organic and conventional cultural practices, and post-harvest handling.
Prerequisite(s): SAFS 421 with a minimum grade of D- or AGFS 421 with a minimum grade of D-.
Equivalent(s): SAFS 601
Grade Mode: Letter Grading

AGFS 602 - Emphasis Development and Professional Pathways in Sustainable Agriculture and Food Systems
Credits: 1
In this 1 credit required course, AGFS juniors convene as a cohort to develop their personal Student-Designed Emphases, a defining component of the AGFS major. Having completed the broad suite of AGFS Foundation Courses and at least some Program Electives by this time, AGFS juniors are well-positioned to reflect upon their evolving interests and chart a thoughtful, upper-level academic path that aligns with their personal and professional goals. Through writing prompts, facilitated peer-to-peer discussions, and faculty-guided development and revisioning of their written emphasis declarations, each student will learn to effectively articulate their area of focus within AGFS while honing their writing and communication skills. To help students connect their Emphases and professional aspirations to University resources, experiential opportunities, and the wide range of careers in the food system, weekly class time will feature interactive guest presentations from AGFS upperclassmen/alumni, program representatives, and food system practitioners.
Equivalent(s): SAFS 602
Grade Mode: Letter Grading

AGFS 620 - Food Systems & Community Resilience
Credits: 4
This course is designed to provide a broad overview of the emerging field of food systems. We will use a systems perspective to better understand how the U.S. food system shapes the food we eat, and the character and health of our communities and environment. In the second half of the course, we will critically evaluate alternative food system development, policies, and initiatives aimed at improving farmers' livelihoods, environmental sustainability, food justice, and community resilience.
Prerequisite(s): SAFS 405 with a minimum grade of D- or AGFS 405 with a minimum grade of D-.
Equivalent(s): SAFS 620
Grade Mode: Letter Grading

AGFS 632 - Urban Agriculture
Credits: 4
Urban agricultural systems play an important role in local food production. Production systems range from community gardens to completely controlled production environments. Urban farmers face unique challenges developing sustainable business models due to high land costs, waste management, post-harvest storage, and limited technical experience. This course provides a practical, hands-on understanding of urban agricultural production systems. Emphasis is placed on controlled environmental agriculture from an urban farmer's perspective through classroom discussion and production systems operation.
Equivalent(s): SAFS 632
Grade Mode: Letter Grading

AGFS 651 - Plant Pathology
Credits: 4
Plant pathology is the science of plant diseases, with implications for human and ecological health. Many principles of animal and human pathology also apply to plants; however, a plant pathologist's goal is to reduce loss and damage to plant populations caused by disease, to increase crop quality, yield, and grower profit. This course provides a survey of plant pathogens, their life cycles, introductory concepts of infection, disease spread, and management. Students will learn about interactions between plants, beneficial and pathogenic microbes, and the environment as well as biological and other methods to control and prevent plant diseases.
Prerequisite(s): BIOL 409 with a minimum grade of D- or SAFS 421 with a minimum grade of D- or AGFS 421 with a minimum grade of D-.
Equivalent(s): BOT 651, PBIO 651, SAFS 651
Grade Mode: Letter Grading
Special Fee: Yes

AGFS 670 - Systems Thinking: Land Use Capability and Sustainability in Aotearoa New Zealand
Credits: 4
This course establishes a conceptual framework in systems thinking to critically examine New Zealand and global examples of the challenges that have arisen from the mismatch between land use and land use capability. Students investigate downstream effects of the rural-urban divide (food-justice), on people, health, services and the environment. Food security, ethical foods, as well as the influence of climate change on food supply and the viability of agribusiness are included.
Co-requisite: AGFS 671, AGFS 672, AGFS 673, INCO 588
Equivalent(s): SAFS 670
Grade Mode: Letter Grading
Special Fee: Yes

AGFS 671 - Agroecology and Sustainable Land Management in Aotearoa New Zealand
Credits: 4
Agroecology is a way of thinking and acting. Using this lens, students investigate the interface of agriculture and the natural environment. Through first-hand experiences with agribusiness, students explore enduring solutions for sustainable food systems. The emphasis will be on dimensions of agroecology that are relevant in a framework of sustainable land management; and on gaining confidence in evaluating processes and science associated with the biological an physical process in agroecosystems.
Co-requisite: AGFS 670, AGFS 672, AGFS 673, INCO 588
Equivalent(s): SAFS 671
Grade Mode: Letter Grading
Special Fee: Yes

AGFS 672 - Pathways to Sustainable Agriculture and Food Systems in Aotearoa New Zealand
Credits: 4
This course empowers students to pursue knowledge and understanding of food systems around the interface of policy, practice, and science to build pathways toward technically robust, economically sound and viable solutions which enable transformation in the rural landscape. Topics include: value systems, socio-cultural benefits of re-thinking food systems at sale, carbon-forestry, carbon offsets, nutrient cap-and-trade models, (Integrated) Catchment Management and Climate Smart Agriculture. Critical thinking and risk assessment tools are integral components.
Co-requisite: AGFS 670, AGFS 671, AGFS 673, INCO 588
Equivalent(s): SAFS 672
Grade Mode: Letter Grading
Special Fee: Yes

AGFS 673 - Agricultural Production and Business Practice in Aotearoa New Zealand
Credits: 4
In this experiential course students will spend time in farm or agri-business placements. Practical, hands-on experience of the workings of agribusiness provides students with opportunities to enhance their autonomy and capacity as active learners. Students will gain transferable skills, increase competency and develop a comprehensive understanding of sustainability initiatives and practices of food systems. Students can transfer insights from classroom work to a practical setting and bring previously developed skills to a new context.
Co-requisite: AGFS 670, AGFS 671, AGFS 672, INCO 588
Equivalent(s): SAFS 673
Grade Mode: Letter Grading
Special Fee: Yes

AGFS 679 - Food Production Field Experience I
Credits: 4
This is part one of a two course series to be taken during spring semester. Course provides students with hands-on experience in growing food and managing a small farm business. We will be growing fresh vegetables and some fruits for the UNH Dairy Bar. Lectures, readings, and hands-on activities during Part I focus on all aspects of production: propagation, crop establishment, irrigation, crop management, soil considerations, and pest and disease practices.
Equivalent(s): SAFS 679
Grade Mode: Letter Grading

AGFS 680 - Food Production Field Experience II
Credits: 4
This is part of a two course series to be taken during fall semester. Course provides students with hands-on experience in growing food and managing a small farm business. We will be growing fresh vegetables and some fruits for UNH Dining Services. Lectures, readings, and hands-on activities in part two focus on crop harvesting and maturity, post-harvest considerations, marketing, special event planning and execution, record keeping, and small farm business management.
Equivalent(s): SAFS 680
Grade Mode: Letter Grading

AGFS 689W - Greenhouse Management and Operation
Credits: 4
Course provides introduction to greenhouse construction, design, environmental control, and current trends in the industry. Fundamentals of starting a greenhouse business including safety and labor, marketing, and post-harvest considerations also covered. Efforts towards making the greenhouse industry more sustainable are explored alongside with certification options and procedures. Crops representative of current major New England crops are grown during lab. Students learn about crop selection and practices including IPM, irrigation, and fertility management. Lab. (Offered alternate years).
Attributes: Writing Intensive Course
Prerequisite(s): SAFS 421 with a minimum grade of D- or AGFS 421 with a minimum grade of D-.
Equivalent(s): PBIO 689, SAFS 689
Grade Mode: Letter Grading
Special Fee: Yes

AGFS 690 - Agricultural and Food Policy
Credits: 4
This course will provide students with a broad understanding of the agri-food sector in the US and the role of government and other stakeholders in developing policies that influence food production, distribution and consumption. It will equip students with tools to analyze public policies and prepare them to effectively engage in real world contemporary debates and problem solving in this field.
Equivalent(s): EREC 680, EREC 704
Grade Mode: Letter Grading

AGFS 733W - Advanced Topics in Agriculture and Food Systems
Credits: 4
In this writing-intensive, capstone course, AGFS juniors and seniors engage in critical, student-led discussion of instructor-chosen and student-selected works related to food systems sustainability across scales, local to global. With these discussions as context, students pursue individual, semester-long projects to practically address a specific issue of interest. The course aims to improve critical reading, writing, discussion, and presentation skills; build cohort cohesiveness; and challenge students' beliefs and working assumptions about agriculture and food systems sustainability.
Attributes: Writing Intensive Course
Equivalent(s): SAFS 733
Grade Mode: Letter Grading

AGFS 750 - Food System Solutions; Increasing Sustainability and Equity
Credits: 4
We will study a range of solutions to address cross-cutting issues in the food system, including unsustainable farming systems, inequitable access to nutritious food, dietary patterns that promote chronic disease, and the lack of sustainable livelihoods for farmers and food chain workers. Students will learn to critically examine policies, programs and social movements aimed at increasing the equity and sustainability of the food system. We will identify the strengths and weaknesses of these approaches, recognizing the limits and blind spots, uneven impacts, and leverage points of the proposed solutions we study.
Prerequisite(s): SAFS 620 with a minimum grade of D- or AGFS 620 with a minimum grade of D- or NUTR 730 with a minimum grade of D-.
Equivalent(s): SAFS 750
Grade Mode: Letter Grading

AGFS 760W - Integrated Pest Management
Credits: 4
This course explores integrated pest management (IPM) in agricultural systems, which uses the fundamentals of pest biology and identification to develop practical and effective pest management plans. In the context of this course, pests include insects, plant pathogens, and weeds. In this course, you will practice written and oral communication of science-based information and practical pest management approaches, and will hone your skills in finding, understanding, and summarizing scientific literature and identifying reliable sources of web-based information.
Attributes: Writing Intensive Course
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Equivalent(s): PBIO 760, SAFS 760
Grade Mode: Letter Grading

AGFS 795 - Investigations
Credits: 1-4
With faculty guidance, students work on individual projects related to sustainable agriculture and food systems.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): AGFS 795W, SAFS 795, SAFS 795W
Grade Mode: Letter Grading

AGFS 795W - Investigations
Credits: 1-4
With faculty guidance, students work on individual projects related to sustainable agriculture and food systems.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): AGFS 795, SAFS 795
Grade Mode: Letter Grading

AGFS 799H - Honors Senior Thesis
Credits: 1-4
Independent research requiring a written proposal, thesis, and presentation of research results to an audience of faculty and/or students. Intended for students completing AGFS Honors-in-Major requirements. Contact AGFS Program coordinator prior to senior year to arrange supervision and obtain permission. Two-semester sequence; students typically register for 5 credits over two semesters.
Attributes: Honors course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): SAFS 799
Grade Mode: Letter Grading

American Sign Language (ASL)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ASL 435 - American Sign Language I
Credits: 0 or 4
Introduction to American Sign Language with emphasis on visual receptive and expressive use of language, as well as providing opportunities for other forms of visual communication such as facial expression, mime, and gesture. Participants develop their skills through videotapes, classroom participation, and readings that cover issues important to the Deaf community. A weekly, one-hour language laboratory is required as part of this course. Limited to 15 students. No credit if credit has been received for COMM 401 (previously COMM 533).
Equivalent(s): COMM 401
Grade Mode: Letter Grading

ASL 436 - American Sign Language II
Credits: 0 or 4
Introduction to American Sign Language with emphasis on visual receptive and expressive use of language, as well as providing opportunities for other forms of visual communication such as facial expression, mime, and gesture. Participants develop their skills through videotapes, classroom participation, and readings that cover issues important to the Deaf community. A weekly, one-hour language laboratory is required as part of this course. Limited to 15 students. No credit if credit has been received for COMM 401 (previously COMM 533).
Prerequisite(s): ASL 435 with a minimum grade of D-.
Grade Mode: Letter Grading

ASL 531 - American Sign Language III
Credits: 0 or 4
Continuation of ASL 436. Expands on groundwork and grammatical principles established in ASL I and II. Introduces the sociolinguistics aspects of ASL as it functions within the deaf cultural context. Limited to 15 students. Lab.
Prerequisite(s): ASL 436 with a minimum grade of D-.
Grade Mode: Letter Grading

ASL 532 - American Sign Language IV
Credits: 0 or 4
Continuation of ASL 531. Expands on the groundwork and grammatical principles established in ASL I, II, and III. Introduces the sociolinguistic aspects of ASL as it functions within the deaf cultural context. Areas of investigation include use of formal versus informal sign register; sign variation by region, age, and gender; social factors that give rise to code switching; and political and cultural evolution of the U.S. deaf community. Taught in the target language using the direct experience method. Limited to 15 students. Lab.
Prerequisite(s): ASL 531 with a minimum grade of D-.
Grade Mode: Letter Grading

ASL 599 - Special Topics
Credits: 1-4
Occasional offerings dependent on availability and interest of faculty. May be repeated barring duplication of subject.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

ASL 621 - Advanced American Sign Language Discourse I
Credits: 0 or 4
Focuses on the use of ASL discourse in formal as well as informal settings. Students explore the genres of public speaking, artistic expression, formal discussion, interview, and narrative. Development of ASL vocabulary in specialized areas not covered in previous courses. Lab.
Prerequisite(s): ASL 532 with a minimum grade of D-.
Grade Mode: Letter Grading

ASL 622 - Advanced American Sign Language Discourse II
Credits: 0 or 4
In this advanced course, students give two PowerPoint presentations on their research on two selected cutting-edge/current Deaf Studies topics, and are assessed on itemized public speaking skills, grammatical features (linguistics) studies that are a culmination of previous ASL courses, and pragmatic language functions. These presentations are to use high/academic register, appropriate for a large academic audience, demonstrating sensitive awareness of visual acuity and its impact on signing production. Lab.
Prerequisite(s): ASL 621 with a minimum grade of D-.
Grade Mode: Letter Grading

American Studies (AMST)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

AMST 444C - Picturing America: The Arts & Social Change
Credits: 4
How has the camera shaped the way we see ourselves, and the world around us? How are photographers and writers--sometimes self-consciously and sometimes unwittingly affected by the definitions of what it means to be an American? What does something American look like? In this class, we'll try to answer that question in all its complexity by looking at both photographic and written documents, from the late nineteenth century, when photography was a relatively new technology, to the present. How can we "read" a photograph? What kinds of ethical and aesthetic concerns are involved in recording "reality?" What is the relationship between art and social concerns? How do photographs tell stories, and with what consequences?.
Attributes: FinePerformingArts(Discovery); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

AMST 444D - Long-Ago Stories Behind Everyday Life
Credits: 4
This interdisciplinary course focuses on the culture of the United States during a specific and short periods of time (1885-1915; 1915-1940; etc). Emphasis is as much on methods of interdisciplinary studies as on the material itself: we'll approach culture through primary sources from a variety of different disciplines: history, sociology, literature, art, architecture, music, film.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

Analytics (DATA)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

DATA 557 - Introduction to Data Science and Analytics
Credits: 4
An introduction to data science and analytics. The landscape of analytics, including an overview of industries and sectors using analytics or expected to use analytics in the near future. Data generation, data management, data cleaning, and data preparation. Ethical use of data. Focus on visual and exploratory analysis. Project-based, with an emphasis on collaborative, experiential learning. Programming and statistical software will be used, but previous experience is not required.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

DATA 674 - Predictive and Prescriptive Analytics I
Credits: 4
A first course in predictive and prescriptive analytics. Supervised learning models including linear models and CART models. Model assessment and scoring methods, including cross-validation. Regularization and model tuning. Unsupervised learning models including k-means clustering. Project-based, with an emphasis on collaborative, experiential learning. Statistical software will be used and programming required.
Prerequisite(s): MATH 425 with a minimum grade of D- and COMP 570 with a minimum grade of D- and DATA 557 with a minimum grade of D-.
Grade Mode: Letter Grading

DATA 675 - Predictive and Prescriptive Analytics II
Credits: 4
A second course in predictive and prescriptive analytics. Time series analysis and model ensembles. Bootstrapping, simulation, optimization. Monte Carlo methods. Project-based, with an emphasis on collaborative experiential learning. Statistical software will be used and programming required.
Prerequisite(s): DATA 674 with a minimum grade of D-.
Grade Mode: Letter Grading

DATA 690 - Internship Experience
Credits: 1-4
A field-based learning experience via placement in a business, non-profit, or government organization using analytics. Under the guidance of a faculty advisor and workplace supervisor, students gain practical experience solving problems and improving operational processes using analytics. May be repeated but no more than 4 credits may fill major requirements.
Prerequisite(s): UMST 582 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

DATA 750 - Neural Networks
Credits: 4
Artificial neural networks power the recent advances in computer vision, speech recognition, and machine translation. This is a first course on neural networks with a focus on applications in computer vision and natural language processing. Topics will include generic feedforward neural networks, convolutional neural networks for computer vision tasks, and recurrent neural networks with application to natural language processing, with other topics to be selected based on the interests of the instructor and the class.
Equivalent(s): COMP 750
Grade Mode: Letter Grading

DATA 757 - Mining Massive Datasets
Credits: 4
A first course in large-scale analytics and data science. Characteristics of big data and the emerging software stack for working with massive datasets, including Hadoop and MapReduce. Algorithms for extracting information from massive datasets. A first course in linear algebra is not a prerequisite, but is recommended.
Prerequisite(s): MATH 425 with a minimum grade of D- and DATA 557 with a minimum grade of D-.
Grade Mode: Letter Grading

DATA 790 - Capstone Project
Credits: 4
Under direction of a faculty mentor, students work in teams to find solutions to complex real-world problems using analytics. Projects may come from internal or external sources. Students define the problem, obtain the necessary data, develop suitable models and solutions, and present their results.
Grade Mode: Letter Grading

Animal Sciences (ANSC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ANSC 401 - Animals and Society
Credits: 0 or 4
Through an interdisciplinary and historical lens, students delve into the interaction and interdependence of animals and people, the changes and patterns over time, and the resulting implications for the animal industry and the quality of life for animals, people, and the planet. Topics covered include agricultural production, organic farming, sustainability, global agriculture, Community Supported Agriculture (CSAs), research, nutrition, food safety, genetics, animal health, aquaculture, animal welfare, breeding, recreation, companionship, and the reproduction of domestic animals. What are the major changes in meat consumption by humans? What is the effect of these changes on the environment and large and small farm operations? What are the effects of biotechnological research performed on animals for human benefits? What is the difference between animal welfare and animal rights? Why should we care? In what ways does this affect us?.
Attributes: Biological Science(Discovery); Discovery Lab Course
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 402 - Horsemanship Lab
Credits: 1
For intermediate and advanced riders. Lab (lesson) format with required co-requisite (hybrid or on-line). Correct position and technique for dressage and combined training with application of appropriate theory. Allow time before and after lab for horse care. For the safety of horse and rider, there is a rider weight limit of 200 pounds for all mounted activities in the UNH Equine Program, including ANSC 402.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

ANSC 406 - Careers in Animal Science
Credits: 1
Students explore a variety of career opportunities within the fields of biotechnology, agriculture, animal science and veterinary medicine. Through class presentations and guest speakers students will learn about steps they could take to enhance their prospects for career success, including the internships, career related employment, research, and study abroad opportunities. Students will also prepare a draft and final resume, articulate a career plan, and write reviews about each of the guest speakers and panelists.
Grade Mode: Letter Grading

ANSC 419 - Horse Power
Credits: 4
Students explore the enduring bond between the horse and man and the effect of that bond on civilization by considering: How has the horse and man's use of the horse shaped civilization and contributed to societal change? How has the progress of civilization and societal change affected the horse and its role in society? What does our use of the horse say about us as individuals and as a society? Cannot receive credit if credit received for ANSC 444B.
Attributes: Humanities(Disc)
Equivalent(s): ANSC 444B
Grade Mode: Letter Grading

ANSC 421 - Introduction to Animal Science
Credits: 4
This course provides an overview of the scope and diversity of animal agriculture at the global, national and local levels. It also provides an introduction to the animal sciences through which students 1) learn basic animal science terminology 2) acquire an appreciation of the objectives of various animal enterprises and 3) gain understanding of contemporary trends, challenges and opportunities within animal agriculture.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 425 - Introduction to Dairy Herd Management
Credits: 4
The course explores economic, scientific and practical aspects of dairy herd management. The topics covered include history, cattle selection, nutrition, housing, milking, and disease prevention strategies. There are a number of field trips and weekly labs emphasizing management and hands-on experience.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 427 - Introduction to Equine Science
Credits: 4
This course familiarizes students with different aspects of equine management through practical work and a hands-on approach. Topics include selection, fit and care of English tack, bits, grooming, clipping, wound care, safe bandaging techniques, equine behavior, basic health care and monitoring, parasite control, and facility requirements and layout. Students will have hands-on work experience in the UNH stable for a total of 16 hours for the semester. Responsibilities include feeding, cleaning, turnout, and basic care of the University herd.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 500 - Equine Assisted Services
Credits: 4
Comprehensive examination of Equine Assisted Services including types of therapeutic riding and its physical, cognitive, and emotional benefits for clients with a variety of disabilities. Topics include hippotherapy, therapeutic riding, equine-facilitated mental health, youth at risk, therapeutic vaulting, carriage driving, equipment needs/modifications, special considerations for selecting and training the therapy horse, and the role of the volunteer therapist and instructor. Students have the opportunity to work with horses and riders in the UNH Therapeutic Riding Program during labs, as well as view other programs on mandatory field trips.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 511 - Animal Anatomy and Physiology I
Credits: 0 or 4
This course focuses on the presentation and discussion of vertebrate (primarily mammalian) anatomic forms and physiologic processes. Lectures are heavily devoted to examining molecular, cellular, tissue, organ, and systems physiology while labs provide the opportunity to correlate this information with investigation of anatomic structures. The course includes an introduction to anatomic terminology and exploration of the mechanisms of major processes and the systematic aspects of the integumentary, musculoskeletal, reproductive, and digestive systems.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Mutual Exclusion: No credit for students who have taken BMS 507.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 512 - Animal Anatomy and Physiology II
Credits: 0 or 4
This course focuses on the presentation and discussion of vertebrate (primarily mammalian) anatomic forms and physiologic processes. Lectures are devoted to examining molecular, cellular, tissue, organ, and systems physiology while labs provide the opportunity to correlate this information with investigation of anatomic structures and application to animal health. Content includes the major physiologic processes and anatomic aspects of the central and autonomic nervous systems; cardiovascular, respiratory, immune, lymphatic, urinary and endocrine systems, and special senses.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and ANSC 511 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken BMS 508.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 515 - Explorations in Veterinary Medicine
Credits: 2
This course will introduce the diversity of career paths available in veterinary medicine and aid students in understanding and preparing for the process of applying to veterinary school. Students will also be exposed to current, significant challenges in the US veterinary medical field and will gain hands-on experience in the UNH PAWS veterinary clinic.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 522 - Ethical Horsemanship - Considerations and Theory
Credits: 3
For riders of all levels who are enrolled in ANSC 402 for the first time AND for students wishing to learn the concepts of ethical horsemanship theory and practices without enrolling in horsemanship (riding) lab. Hybrid format, includes weekly face-to-face and online lectures/content with optional lab (ANSC 402). Use of an animal for purposes of sport and recreation is a privileged and optional activity, which is not necessary to human survival as the horse's traditional roles once were. Ethical use of the animal in such a context requires thorough knowledge and analysis of the horse's physical and psychological traits, as well as critical evaluation of the rider's goals and techniques in relation to the animal's needs and well-being.
Co-requisite: ANSC 402
Attributes: Writing Intensive Course
Equivalent(s): ANSC 405
Grade Mode: Letter Grading

ANSC 526 - Equine Conformation, Movement, and Performance
Credits: 4
Unique among domesticated species, the horse's primary role is performance rather than food, fiber, or companionship. Although horses are inherently athletic, not all individuals have the same athletic ability, and even individuals with superior physical traits require athletic development to realize them in performance. This class will examine the interrelated concepts of equine conformation, movement, and performance with the goal of understanding the relationship between an animal's natural qualities, its fitness, its athletic potential, and its limitations.
Prerequisite(s): ANSC 437 with a minimum grade of D- or ANSC 427 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 536 - Preparation and Competition Techniques for the Modern Sport Horse
Credits: 4
Course addresses the safe handling and appropriate grooming and clipping techniques for modern sport horses as they are prepared for competition. Additional topics include trailering, studding, post-workout care an other industry skills. Students will evaluate selection and movement of sport-horses while in-hand and demonstrate knowledge by showing horses in best practice for the type and style. Students will demonstrate horse-handling proficiency while showing their assigned horse in-hand at the annual Little Royal Livestock & Horse Show. Lecture and lab format, including industry guest speakers and demonstration.
Prerequisite(s): (ANSC 427 with a minimum grade of D- or ANSC 437 with a minimum grade of D-) and (ANSC 522 with a minimum grade of D- or ANSC 422 with a minimum grade of D-).
Equivalent(s): AAS 536
Grade Mode: Letter Grading

ANSC 538 - Equine Handling/Longeing
Credits: 1
This seven-week intensive course provides students with the opportunity to learn to longe a variety of University horses in an enclosed arena under private instruction. The emphasis is on safety and welfare of the horse and handler. Proper equipment and fit are addressed along with different training techniques used to improve the horse's quality of movement.
Equivalent(s): AAS 538
Grade Mode: Letter Grading

ANSC 543 - Technical Writing in Animal Sciences
Credits: 2
Emphasis on writing scientific articles and articles for the end user on subjects pertaining to the animal science industry. Students are expected to make several oral presentations. Resume preparation is also included.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D-.
Equivalent(s): ANSC 743
Grade Mode: Letter Grading

ANSC 548 - Agricultural Business Management
Credits: 4
This course is designed to provide students with language, knowledge, techniques, and skills necessary for a career in the agriculture industry, specifically for agricultural service providers or farm business operators. Students will gain foundational context regarding agricultural and financial record keeping and building financial statements. They will then apply their knowledge in collaboratively developing a realistic, detailed whole farm record keeping plan and financial statement package for a model farm.
Equivalent(s): AAS 548, ANSC 635
Grade Mode: Letter Grading

ANSC 600 - Field Experience
Credits: 1-4
A supervised experience providing the opportunity to apply academic experience in settings associated with future professional employment and/or related graduate opportunities. Must be approved by a faculty adviser selected by the student. Permission of supervising faculty member required.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

ANSC 602 - Animal Rights and Societal Issues
Credits: 4
To explore all aspects of human-animal interaction and welfare, emphasizing social, ethical, biological, historical and economic aspects of animal care and use.
Attributes: Writing Intensive Course
Equivalent(s): ANSC 407
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 603 - Introduction to Livestock Management
Credits: 4
This course explores the economic, scientific, and practical aspects of livestock management in New England, related to swine, beef, cattle, sheep, goats, and rabbits. This will include breed selection, feeding, reproduction, health, and housing systems. Product harvesting and food safety regulations related to sales and marketing are explored. Students will also be required to manage and care for a flock of sheep at UNH as part of their weekly laboratory exercises.
Prerequisite(s): ANSC 421 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 605 - Poultry Production and Health Management
Credits: 4
This course focuses on understanding how the management practices used in raising domestic poultry can promote the production of healthy birds. Discussion centers on chickens in both large and small commercial flocks. Topics covered include breed and stock selection, anatomy & physiology, hatcher and brooder management, commercially important diseases, biosecurity and preventative health care, applicable food safety practices, and welfare. Students will gain hands-on experience working with live poultry during this course.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 609 - Principles of Animal Nutrition
Credits: 0 or 4
The study of nutrition is grounded in physiology, and linked to other fields, including anatomy, biochemistry, and microbiology. This course introduces important nutritional concepts fundamental to understanding the digestion and metabolism of carbohydrates, fat, and protein, as well as the primary functions of vitamins and minerals. Students gain an integrated understanding of the physiological requirements and functions of protein, energy, and the major vitamins and minerals that are determinants of health in animal species.
Prerequisite(s): CHEM 403 with a minimum grade of D- and CHEM 404 with a minimum grade of D- and ANSC 511 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 612 - Genetics of Animals
Credits: 0 or 4
Application of the physical and chemical bases of heredity to the inheritance patterns and allele frequencies related to qualitative, quantitative, and sex-linked traits in animals. Overview of current genetic, genomic, and biotechnological applications to the health, behavior, and evolutionary relationships of domestic and wild animals.
Prerequisite(s): BIOL 411 with a minimum grade of C- or BIOL 411H with a minimum grade of C- or BIOL 413 with a minimum grade of C-.
Grade Mode: Letter Grading

ANSC 622 - Further Explorations in Horsemanship Theory
Credits: 2
For intermediate and advanced riders who have already completed ANSC 522. Online format, with required lab (ANSC 402) as a co-requisite. Students will use online content and independent study projects for in-depth explorations of more advanced topics related to the theory of dressage, jumping, and horsemanship, with particular attention to the application of correct theory to the individual rider's current skills, goals, and lab activities. May be repeated, with a different focus in subsequent semesters.
Co-requisite: ANSC 402
Prerequisite(s): ANSC 522 with a minimum grade of D- or ANSC 405 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 10 credits.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 625 - Animal Diseases
Credits: 4
This course focuses on concepts of animal health and disease primarily as they relate to domestic agricultural species. Basic principles of diagnosis, transmission treatment, and prevention are introduced and applied to the presentation of specific disease conditions. The course is divided into sections that focus on the primary body system that is affected by the disease or disorder and a heavy emphasis is placed on learning the skills necessary to recognize and prevent disease.
Prerequisite(s): ANSC 511 with a minimum grade of D- and ANSC 512 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 627 - Animal Health Applications
Credits: 4
This course will use a case-based approach to integrate foundational concepts of animal anatomy and physiology with animal health and disease. Independent research of specific animal diseases cases will inform discussion of body systems in a variety of domestic animal species, targeting primarily farm animals, horses, dogs and cats. Hands-on laboratory experiences will use live domestic animals on campus to apply principles of disease diagnostics, prevention and treatment learned in class.
Prerequisite(s): ANSC 511 with a minimum grade of D- and ANSC 512 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 640 - Principles of Riding Instruction
Credits: 4
Introduction to the principles, theory and practice of Riding Instruction. Includes discussion of styles of learning and instruction as applied to a riding environment, student assessment, skill acquisition, lesson planning, horse selection and principles of group and private riding instruction. Students will use lab time to observe, assist and practice teaching in sections of ANSC 402, which will be matched according to their abilities and interests. Students will prepare for ARIA licensing examinations as part of class. Fall semester only. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): ANSC 522 with a minimum grade of D- or ANSC 405 with a minimum grade of D-.
Grade Mode: Letter Grading

ANSC 641 - Principles of Dressage Instruction
Credits: 2
Advanced principles and theory of dressage and advanced concepts in teaching and coaching dressage. Students will use lab time to observe, assist and practice teaching in dressage-only sections of ANSC 402. Students will prepare for ARIA licensing examinations as part of class. Spring semester only. Lab.
Prerequisite(s): ANSC 640 with a minimum grade of D-.
Grade Mode: Letter Grading

ANSC 642 - Principles of Jumping Instruction
Credits: 2
Advanced principles and theory of jumping and advanced concepts in teaching and coaching over fences in the arena and cross-country. Students use lab time to observe, assist and practice teaching in intermediate I and II level sections of ANSC 402. Lab. Offered spring semester of every odd numbered year.
Prerequisite(s): ANSC 640 with a minimum grade of D-.
Grade Mode: Letter Grading

ANSC 643 - Principles of Therapeutic Riding Instruction
Credits: 4
Principles and theory of teaching therapeutic riding, including special considerations of teaching in a therapeutic environment and methods of instruction for individuals with a variety of disabilities. Lab consists of observing, assisting and practice-teaching in UNH Therapeutic Riding Program as preparation for PATH International CTRI instructor certification. Spring semester only, biannually, odd numbered years.
Prerequisite(s): ANSC 500 with a minimum grade of D- and (ANSC 437 with a minimum grade of D- or ANSC 402 with a minimum grade of D-).
Grade Mode: Letter Grading

ANSC 647 - Equine Stable Management
Credits: 4
Students learn to make equine management decisions based upon science and business principles through managing a subset of the UNH horse herd. Students will collectively manage the routine care of horses 7 days a week; completing daily barn chores, monitoring nutrition and health parameters and maintaining records. Lecture topics will complement the barn management tasks including herd health and husbandry, human resources, and stable design. Field trips highlight different-sized equine enterprises.
Prerequisite(s): ANSC 427 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 650 - Dairy Industry Travel Course
Credits: 1
Extended field trip (5-6 days) to a variety of dairy farms and dairy related businesses with students and faculty from other New England land grant universities. Includes discussion sessions, case study, problem solving, and journal report. Additional travel costs may vary based on location of the extended field trip, which can include New England or other regions of the US and Canada.
Repeat Rule: May be repeated for a maximum of 2 credits.
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 665 - Agricultural & Equine Event Design, Planning and Management
Credits: 2
This course provides students with theory and hands-on involvement in the organizational process of planning, managing and executing an agricultural event. Topics include budgeting, logistics, working with forms, sponsorship, publicity, prizes & awards with a focus on facilities, risk, volunteer, and personnel management. Throughout the course, students will apply real-world problem-solving skills and decision-making techniques. Fall semester the class meets for the 1st half and Spring semester, the 2nd half of the term.
Grade Mode: Letter Grading

ANSC 670 - Exotic Companion Species Health and Management
Credits: 4
This course focuses on concepts of health and disease as they relate to companion zoological species (i.e. exotic pets and those species kept in small, living collections) management. Developing an understanding of species specific needs and utilizing this knowledge to promote physical and mental health in a captive environment will be core themes of the course. Previous coursework in animal anatomy & physiology recommended.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading

ANSC 690 - Livestock and Wildlife in Namibia: Challenges, Opportunities and Geography
Credits: 4
This course explores the economic, historic, geographic, scientific and cultural aspects of livestock and wildlife management in Namibia. Its people developed unique models of conservation, as alternatives to national parks and private land in managing wildlife and livestock. Students will gain insight into this unique country and its animals, through lecturers, research, writing and direct interaction with practitioners in the study abroad component.
Attributes: World Cultures(Discovery); Writing Intensive Course
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 695 - Supervised Teaching Experience
Credits: 1-2
Participants are expected to perform such functions as leading discussion sections, directing and assisting in laboratories, and assisting students with their problems in courses that participants have completed successfully. Enrollment is limited to juniors and seniors who have a minimum 3.00 cumulative average.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

ANSC 698 - Cooperative for Real Education in Agricultural Management (CREAM)
Credits: 4
CREAM (Cooperative for Real Education in Agricultural Management) is a 2-semester course in which students perform the work and make the financial management decisions associated with the CREAM dairy herd. Students assume complete responsibility for the management and care of the 25-cow herd for the entire academic year. CREAM provides students with a unique experiential learning model that will help them understand how to work together to manage and operate a small business, the decision-making skills required in production agriculture and the application of science to the management of a dairy herd. Two semesters of 4 cr. each are required.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): AAS 275, ANSC 615
Grade Mode: Letter Grading

ANSC 701 - Physiology of Reproduction
Credits: 4
Comparative aspects of embryology, anatomy, endocrinology, and physiology of reproduction. Lab.
Grade Mode: Letter Grading

ANSC 704 - Advanced Equine Physiology and Lameness
Credits: 4
This course will provide the student with an overview of equine specific anatomy and physiology through the context of important pathologic equine conditions. This course focuses on the major causes of lameness in horses and the process of diagnosing and treating them. Students will work through clinical cases in a discussion format to determine the cause of the lameness and develop treatment plans for each case.
Prerequisite(s): (ANSC 511 with a minimum grade of D- and ANSC 512 with a minimum grade of D-) or (BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-).
Grade Mode: Letter Grading

ANSC 710 - Dairy Nutrition
Credits: 4
Feeding management of dairy cattle. Emphasis on feedstuffs, nutritional requirements, and diet formulation for efficient production and optimum health.
Prerequisite(s): ANSC 609 with a minimum grade of D- or NUTR 750 with a minimum grade of D-.
Grade Mode: Letter Grading

ANSC 715 - Physiology of Lactation
Credits: 4
Examines the biological and biochemical influences of the lactation process. Emphasis on the physiological effects of environments, hormones, and nutrition on milk synthesis and secretion, mammary physiology, and maternal response.
Prerequisite(s): ANSC 511 with a minimum grade of D-.
Grade Mode: Letter Grading

ANSC 724 - Reproductive Management and Artificial Insemination
Credits: 0 or 4
Focus on goals and fundamentals of reproductive management of horses, dairy and livestock animals, and through actual experience, development of competency in performing modern breeding techniques for equine and bovine reproduction. Lab.
Prerequisite(s): ANSC 511 with a minimum grade of D-.
Equivalent(s): ANSC 652
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 727 - Advanced Dairy Management I
Credits: 4
Advanced management evaluation of milking procedures, reproduction, genetics, herd health, feeding, housing, and milking systems.
Equivalent(s): ANSC 615
Grade Mode: Letter Grading

ANSC 728 - Advanced Dairy Management II
Credits: 4
Advanced management evaluation of record keeping, financial and business management, personnel management, waste management, and marketing.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading
Special Fee: Yes

ANSC 750 - Collaborative Farm Design and Development
Credits: 4
As a semester long group project, students will design an economically feasible, fully operational, diversified small farm. Students will need to consider site selection, infrastructure, equipment, labor, animal production and health, financing options, marketing and sales, etc. in their design. The final project will be presented in both an oral and a written format. Independent initiative and group collaboration are both integral to success in this project.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ANSC 795 - Investigations
Credits: 1-4
Investigations in genetics, nutrition, management, diseases, histology, equestrian management/agribusiness, physiology, cell biology, microbiology, dairy management, or teaching experience.
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): ANSC 795W
Grade Mode: Letter Grading

ANSC 795W - Investigations
Credits: 1-4
Investigations in genetics, nutrition, management, diseases, histology, equestrian management/agribusiness, physiology, cell biology, microbiology, dairy management, or teaching experience.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): ANSC 795
Grade Mode: Letter Grading

ANSC 797 - Equine Capstone Experience
Credits: 4
This course allows students to review critical professional skills, concepts and theories necessary for success within the equine industry and then to demonstrate competence in these areas, to a panel of equine program faculty. Students also coordinate logistics and content of an outreach Equine Education Day. Successful completion allows students to showcase professional skills and abilities to the non-academic equestrian community.
Prerequisite(s): ANSC 796 with a minimum grade of D-.
Grade Mode: Letter Grading

ANSC 799 - Honors Senior Thesis
Credits: 1-4
Independent research culminating with a written honors thesis in A) Genetics; B) Nutrition; C) Management; D) Diseases; E) Histology; F) Light Horsemanship; G) Physiology; H) Cell Biology; I) Microbiology; J) Dairy Management.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Anthropology (ANTH)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ANTH 411 - Global Perspectives on the Human Condition: An Introduction to Anthropology
Credits: 4
This course introduces students to the core concepts, methods, and research of contemporary cultural anthropology, as well as to the ways in which the discipline is relevant to their daily lives. Students will learn how anthropology approaches the study of culture, language and communication, family and kinship, gender and sexuality, race and ethnicity, economic relationships, political systems, religion, social change and globalization. Ethnographic material from both the U.S. and cross-culturally, as well as a series of hands-on, experiential and interactive activities, will demonstrate anthropological concepts and questions.
Attributes: World Cultures(Discovery)
Equivalent(s): ANTH 411H, ANTH 411W
Grade Mode: Letter Grading

ANTH 411W - Global Perspectives on the Human Condition: An Introduction to Anthropology
Credits: 4
This course introduces students to the core concepts, methods, and research of contemporary cultural anthropology, as well as to the ways in which the discipline is relevant to their daily lives. Students will learn how anthropology approaches the study of culture, language and communication, family and kinship, gender and sexuality, race and ethnicity, economic relationships, political systems, religion, social change and globalization. Ethnographic material from both the U.S. and cross-culturally, as well as a series of hands-on, experiential and interactive activities, will demonstrate anthropological concepts and questions.
Attributes: World Cultures(Discovery); Writing Intensive Course
Equivalent(s): ANTH 411, ANTH 411H
Grade Mode: Letter Grading

ANTH 412 - Broken Pots and Buried Cities: Introduction to World Archaeology
Credits: 4
Traces the history of archaeology's most spectacular finds and how those moments of adventure and glory developed into a scientific discipline. Provides an introduction to the methods used by archaeologists to recover, analyze, and interpret data in their ongoing effort to understand humanity through the analysis of those small things left behind.
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

ANTH 415 - The Human Story: Evolution, Fossils and DNA
Credits: 4
This course uses an evolutionary approach to investigate human biological and bio-cultural variation in time and space. Through a study of the basics of population genetics, an evaluation of our closest living relatives, nonhuman primates, and an exploration of the biological and cultural pathways traversed by our ancestors to become modern Homo sapiens, students learn the depth and complexity of the human story. Laboratory exercises dealing with human genetics, hominin fossils, and evolution are integrated with lectures to give students hands-on learning experience. No credit earned if credit received for ANTH 413.
Attributes: Biological Science(Discovery)
Equivalent(s): ANTH 413
Grade Mode: Letter Grading

ANTH 440A - Medicine and Culture: Science, Technology and the Body
Credits: 4
This course offers an introduction to medical anthropology, an interdisciplinary inquiry of the social and natural sciences, by using approaches from science and technology studies (STS). It surveys several key concepts from STS as well as case studies of current medical and biotechnologies—how they 'work,' their context of development, how expert-designed use mis-matches users' embodied experience, and how individuals and communities adopt, resist, or seek alternative medical explanations and treatments based on their experience cross-culturally.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

ANTH 500 - Peoples and Cultures of the World
Credits: 4
Explores cultures and peoples from specific geographic regions of the world. Broadly considers social, gendered, economic, and political changes in ecological and historical context, focusing on precolonial, colonial, and contemporary societies and globalization. Sections: A. North America, B. Latin America, C. Middle East and North Africa, D. Africa, E. Southeast Asia. May be repeated barring duplication of subject.
Attributes: World Cultures(Discovery)
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): ANTH 500W
Grade Mode: Letter Grading

ANTH 501 - World Archaeological Cultures
Credits: 4
Explores past peoples and societies from specific geographic regions of the worlds through archaeological material culture, such as tools, art, and architectural remains. Broadly considers social, gendered, economic, and political dynamics of ancient (premodern) societies in ecological and historical context and the role of material culture in the present. Sections: A) North America; B) Mesoamerica; C) South America; D) Near East; E) Europe; F) Asia. May be repeated barring duplication of subject.
Attributes: World Cultures(Discovery)
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

ANTH 513 - Ethnographic Methods
Credits: 4
The course introduces students to social science research and differences between quantitative and qualitative research methods, and provides a hands-on experience to develop skills in interviewing, participant-observation, life-history, surveying, socio-linguistics, fieldnotes, and ethics of the research.
Attributes: Inquiry (Discovery)
Grade Mode: Letter Grading

ANTH 514 - Method and Theory in Archaeology
Credits: 0 or 4
Basic method and theory; techniques in recovering and interpreting data; laboratory exercises in ceramic and lithic analysis. Critical evaluation of archaeological literature.
Attributes: Inquiry (Discovery)
Grade Mode: Letter Grading

ANTH 525 - Anthropology of the Body: Fat, Fitness and Form
Credits: 4
This course surveys the way our human bodies are valued, transformed, experienced and made subject to control in different societies around the world. It explores cultural constructions of fatness and obesity, fitness and sports as sites of politics, economics and social change, and bodily modification and dis-integration in tattooing, injury, biomedical technology, disability, aging, and extreme environments of war and outerspace. Uses anthropological and feminist theories and introduces ethnographic methods.
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

ANTH 527 - Humanities and Religion
Credits: 4
This course examines the role of religion, religious ideas and religious practice in world cultures using a combination of methodologies drawn from different humanities disciplines, with a particular emphasis on comparative approaches and investigating how religion is used to create and express cultural identity around the globe.
Attributes: World Cultures(Discovery); Writing Intensive Course
Equivalent(s): HUMA 527
Grade Mode: Letter Grading

ANTH 530 - Multispecies Planet: Animals, Plants, and Landscapes Across Cultures
Credits: 4
This course takes a big-picture approach to investigating how humans in diverse cultures have related to the non-human world, placing an emphasis on landscapes and plant and animal species. Comparing our Western worldviews and practices with Indigenous approaches, we will identify the underlying assumptions with which humans and their technologies have encountered, modified, and impacted the natural world. Designed with an experiential component, the course invites us to rethink our philosophies and sustainability of the human/non-human interface.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

ANTH 550 - Introduction to Forensic Anthropology
Credits: 4
This course provides an overview of forensic anthropology, a sub-field of biological anthropology that applies knowledge of skeletal anatomy to problems of medico-legal significance (i.e., identification of human skeletal remains and interpretation of the circumstances surrounding death). This course outlines concepts underlying the recovery and analysis of human remains, the determination of the biological profile (including age, sex, ancestry, and stature), and the interpretation of skeletal trauma and pathology.
Attributes: Biological Science(Discovery)
Grade Mode: Letter Grading

ANTH 610 - Medical Anthropology: Illness and Healing
Credits: 4
Intermediate-level introduction to medical anthropology through sociocultural and bioarchaeological approaches to describing health-related ideas and practices in cross-cultural, historical and ecological contexts. Focuses on human illness and religious experiences of disease and the end of life. Considers how suffering, diagnosis, treatment, prevention, and care are shaped by: religion and ritual; symbolism and language; age, gender and sexuality; families, social movements, and governments; and the worldwide expansion of biomedical expertise and technologies.
Grade Mode: Letter Grading

ANTH 611 - History of Anthropological Theory
Credits: 4
Provides a grounding in the history of social thought in cultural anthropology and sister disciplines from 19th century evolutionism to the present. Course reading is based on primary sources - original essays written by theorists central to the discipline. Assessment is partly based on students' ability to apply theoretical concepts to novel contexts, as well as the ability to evaluate and compare theories on the basis of logic and evidence.
Grade Mode: Letter Grading

ANTH 612 - Applied Anthropology
Credits: 4
Introduces students to the ways anthropological questions, concepts, and methods are applied to real world problems. Students learn how anthropological knowledge and methods can be used in a wide range of disciplines and careers. The course includes experiential learning where students engage with professionals doing work within applied anthropology. Students gain perspective on the practical possibilities in their major and acquire skills to position themselves for future careers.
Grade Mode: Letter Grading

ANTH 620 - Ritual and Religion of Ancient Mesoamerica
Credits: 4
This course examines the religious beliefs and ritual practices of ancient Mesoamerican cultures, such as the Olmec, Maya, and Aztecs. Students learn about the meaning of ritual practices (like human sacrifice and burial rites) and the myths that underlie this mysterious ritual behavior from an archaeological perspective. This class is writing intensive and involves primarily in-class discussion. Students are evaluated based on their participation, oral presentations, and a number of writing assignments.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ANTH 625 - Sexuality in Cross-Cultural Perspective
Credits: 4
This course examines the ideologies and practices associated with sexuality from a broad perspective that incorporates diverse case studies from the ethnographic record. Working from the argument that much of human sexual behavior is culturally constructed rather than biologically determined, the course invites students to expand their notion of the "normal" and to consider the human condition from a cross-cultural perspective. Topics discussed include cross-cultural varieties of transgendered experience, same-sex sexualities, and heteronormative identities.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ANTH 640 - Anthropology of Islam: Muslims' Everyday Lives in Contemporary Communities
Credits: 4
This course introduces students to different ways of being Muslim in contemporary world, focusing on Muslim communities residing in Central Asia (post-Soviet independent countries, China, and Afghanistan); the United States and some parts of Europe; and the Middle East and North Africa (MENA).
Grade Mode: Letter Grading

ANTH 645 - Cultural Sustainability and the Role of Public Archaeology
Credits: 4
In archaeology, the sustainability movement has encouraged increased outreach and education in an effort to make archaeology relevant to the public and to sustain past lifeways, especially cultural traditions threatened of being erased in our increasingly homogenized and globalized world. Students will be introduced to this field and experience for themselves how to translate academic archaeology to the masses through public programming, from designing museum exhibits to participating in "open archaeology" education for the public.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ANTH 650 - Anthropology of Migration and Movement
Credits: 4
This course uses an anthropological framework to gain a more nuanced understanding of the complexities of global migration and human movement. It will examine the theoretical underpinnings of an anthropological perspective on migration and movement, and will explore a variety of ethnographic case studies to explore the significant political, economic, environmental, legal, and social issues that influence global migration.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ANTH 655 - Bioarchaeology of the Human Past
Credits: 4
Bioarchaeology is the study of human remains from ancient and historical sites. Past populations can be examined by utilizing principles of skeletal and dental biology, as well as archaeological context and ethnohistory, to address anthropological questions. This course will encompass a global survey of bioarchaeological sites and research, and focus on historically marginalized groups like women and children in the past. Students will explore ethical issues, controversies, excavation methods, and inclusion of indigenous communities.
Prerequisite(s): ANTH 415 with a minimum grade of C.
Grade Mode: Letter Grading

ANTH 660 - Human Osteology
Credits: 4
This course is an introduction to the human skeletal system through a combination of lectures, online resources, laboratory work, and case studies. The course covers the growth and development of the human skeleton, identification of bones and teeth, siding of bones and teeth, and major cranial landmarks. The focus of the course is on learning and developing osteological identification skills, though the main concepts of the biological profile (e.g., population affinity, skeletal sex, stature, and age estimation) are introduced. The skills developed in this course are prerequisites for advanced training in identifying pathological conditions, trauma analysis, and biological profile creation for bioarchaeology and forensic anthropology.
Grade Mode: Letter Grading

ANTH 661 - Advanced Human Osteology
Credits: 4
This course will build on the skills and topics covered in ANTH660 (Human Osteology). This course will focus on methods in osteology, applicable to those interested in forensic anthropology and/or bioarchaeology. This hands-on course will delve into the most current standards for estimations of the biological profile (osteological sex, age-at-death, biogeographic ancestry, and stature), as well as the interpretation of evidence of pathological conditions and traumatic injuries on skeletal and dental tissues. Further, this course will continue to refine students' skills with commingled and fragmentary remains—a reality of working in either forensic anthropology or bioarchaeology.
Prerequisite(s): ANTH 660 with a minimum grade of D-.
Grade Mode: Letter Grading

ANTH 665W - Forensic Cold Case Investigation
Credits: 4
This course introduces students to the issues involved in investigating and solving cold cases in forensic anthropology. Often, forensic anthropologists are contacted by law enforcement to assist with recovery and identification of human remains that have been discovered years after a crime was committed. In addition to covering the basics of forensic anthropology (e.g. age and sex estimation from human remains, search and recovery methods, interpretation of skeletal trauma), this course will focus on topics such as ethics in investigation, addressing media bias, forensic genealogy and new techniques in solving crimes, and understanding the "missing missing." New Hampshire cases will be discussed and students will become familiar with the processes of solving cold cases in their home state. A special focus on social justice and activism work surrounding cold cases will be pursued in this course. By the end of the course, students interested in criminal justice, anthropology, and social work will have a better understanding of the issues and problems involved in resolving long-standing cold cases.
Attributes: Writing Intensive Course
Prerequisite(s): JUST 401 with a minimum grade of D- or ANTH 411 with a minimum grade of D- or ANTH 412 with a minimum grade of D- or ANTH 415 with a minimum grade of D- or ANTH 550 with a minimum grade of D-.
Grade Mode: Letter Grading

ANTH 674 - Archaeological Survey and Mapping in Belize
Credits: 4
Involves hands-on training in field reconnaissance, survey and mapping of archaeological sites, and the use of ARCGIS mapping software. This field course takes place in Belize (Central America) and will be of interest to students studying anthropology, geography and geospatial technologies, among others.
Co-requisite: INCO 589
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading
Special Fee: Yes

ANTH 685 - Gender, Sexuality and HIV/AIDS in Africa
Credits: 4
HIV/AIDS has been defined as one of the exceptional global pandemics of the Millennium. This course traces the rise and global spread of HIV and AIDS and the introduction of antiretroviral therapies and preventions in African and its Diasporas with a focus on sex and gender. Includes findings on heterosexual and LGBTIQA individuals, couples, and communities and perspectives on: kinship, marriage, love, transactional sex, reproduction, contraception, gender-based violence, and activist movements. Uses ethnographies and health sciences databases.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ANTH 695 - Globalization and Global Population Health
Credits: 4
This anthropology course focuses on the study of human population health, in particular the coevolution of humans and diseases as well as disease causation and impacts on the human species globally. This course pulls from evolutionary theory, bioarchaeological evidence, and contemporary medical anthropological and global public health approaches to examine how human populations are formed and sustain themselves through time and space. Specific topics vary, but may include historic urbanization and proliferation of crowd-diseases, the spread of novel pathogens through global exploration and colonization, the re-emergence of infectious diseases, the politics of global health interventions, and sustainable health movements.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ANTH 697 - Special Topics
Credits: 4
Occasional or experimental offerings. May be repeated for different topics. Operates on a seminar format.
Attributes: Writing Intensive Course
Prerequisite(s): ANTH 411 with a minimum grade of D- or ANTH 412 with a minimum grade of D- or ANTH 415 with a minimum grade of D-.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

ANTH 699 - Senior Thesis
Credits: 4 or 8
Thesis-driven course consisting of independent work in the library, collections, or field sites. Recommended for, but not confined to, majors intending to pursue graduate studies or anthropological or archaeological career. Contact a faculty member to obtain approval and arrange supervision prior to senior year. Thesis will be taken over the course of 2 semesters for 8 credits total. As a continuous course, an IA grade will be given at the end of the first semester.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ANTH 699H - Honors Senior Thesis
Credits: 4 or 8
Independent work in the library or field; recommended for, but not confined to, majors intending to pursue graduate studies; required for honors candidates. Contact staff to obtain approval and arrange supervision prior to senior year. 4 or 8 credit 2 semesters, 8 credits required for honors; an IA grade (continuous course) given at end of first semester.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ANTH 699
Grade Mode: Letter Grading

ANTH 700 - Internship
Credits: 1-4
Provides student with supervised practical experience in anthropology in one of the following areas: A) professional or community support work within an academic or applied anthropology setting; B) teaching; C) museum work; D) archaeological laboratory or fieldwork; E) research on a faculty research project; F) editorial work on a journal or faculty book project.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ANTH 785 - The Anthropology of Dreams and Dreaming
Credits: 4
This course emphasizes the "dream theories" of indigenous societies and how beliefs and practices associated with dreaming are integrated into cultural, ontological, political, economic, and religious systems. Western theories are also examined from within a comparative perspective--from basic Freudian models to contemporary scientific debates about the neurological origin and significance of dreaming.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ANTH 795 - Reading and Research
Credits: 1-8
A) Cultural/Social Anthropology; B) Anthropological Linguistics; C) Archaeology; D) Physical Anthropology.
Grade Mode: Letter Grading

ANTH 796 - Reading and Research
Credits: 1-8
A) Cultural/Social Anthropology; B) Anthropological Linguistics; C) Archaeology; D) Physical Anthropology.
Grade Mode: Letter Grading

ANTH 797 - Advanced Topics
Credits: 4
Advanced or specialized courses presenting material not normally covered in regular course offerings. May be repeated, but not in duplicate areas. Course descriptions on file in the department office during registration. A) Social Organization; B) Economic Anthropology; C) Anthropology of Religion; D) Political Anthropology; E) Social Impact Analysis; F) Cultural Ecology; G) Prehistoric Archaeology; H) Historic Archaeology; I) Cultural Resources Conservation; J) Lithic Analysis; K) Ceramic Analysis; L) Faunal Analysis; M) Human Evolution; N) Human Variations; O) Anthropological Theory. Operates on a seminar format.
Attributes: Writing Intensive Course
Prerequisite(s): ANTH 411 with a minimum grade of D- or ANTH 412 with a minimum grade of D- or ANTH 415 with a minimum grade of D-.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

Applied Animal Science (AAS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

AAS 421 - Large Animal Behavior and Handling Techniques
Credits: 2
Introduction to domestic large animal behavior and handling techniques. Cattle, horses, swine, and sheep are used in this course. Students perform routine health-related procedures and gain valuable hands-on skills and safe animal handling techniques which can be applied to the fields of veterinary medicine, animal research, commercial agriculture, and animal control. 1 lec/1 lab.
Equivalent(s): ANSC 408, ANSC 508
Grade Mode: Letter Grading

AAS 423 - Dairy Selection
Credits: 2
Selection techniques used in cattle for purchase, breeding, and genetic improvement through the use of visual evaluation, pedigrees, production, and progeny information. 1 lec/1 lab.
Grade Mode: Letter Grading
Special Fee: Yes

AAS 432 - Introduction to Forage and Grassland Management
Credits: 3
Introduction to grasslands of the world and their management. Special emphasis on the identification, production, and utilization of New England forage crops for feeding domestic farm animals. The course includes the selection of local plant species and varieties, including their management and recommended harvesting practices. The course also includes a basic introduction to soils, as well as nutrient and fertility management.
Grade Mode: Letter Grading
Special Fee: Yes

AAS 434 - Equipment and Facilities Management
Credits: 3
Operation of agricultural equipment and maintenance of agricultural facilities as found in New England. Development of the essential skills and technical information needed to manage and supervise agricultural facilities and equipment. 2 lec/1 lab.
Grade Mode: Letter Grading

AAS 439 - Fundamentals of Animal Health
Credits: 2
Covers the principles of maintaining animal health by preventing and managing disease via husbandry, immunization, diagnostic testing and treatment. Focus is on domestic species; primarily dogs, cats, horses and cows. Topics include external and internal parasitology, microbiology, immunology including vaccination, and disease treatment. Course is designed to be taken along with the appropriate lab section: AAS 439A for Applied Animal Science majors or AAS 439B for VTEC majors, respectively. No credit earned if credit was received for VTEC 439.
Equivalent(s): VTEC 439
Grade Mode: Letter Grading

AAS 597 - Applied Animal Science Work Experience
Credits: 0
Employment (12 weeks, generally in the summer following the first year) in an approved animal-related position.
Equivalent(s): AAS 297
Grade Mode: Credit/Fail Grading

Applied Business Management (ABM)

No courses are currently active in the course inventory for this subject prefix.

Applied Studies (APST) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

APST 405 - Career Development and Planning
Credits: 2
This course engages participants in the career development and life planning process. The course may help students explore and apply to their own life situations knowledge of adult and career development and the skills and methods of career planning. Students may define and articulate the elements important to personal career satisfaction and develop strategies to achieve it. The course may include self-assessments, researching career information, decision-making, goal setting, and job search strategies. NOTE: Students in the A.S. Business and B.S. Business Management programs should take APST 405 and CMPL 402 together.
Equivalent(s): APST 505G
Grade Mode: Letter Grading

APST 605A - Practicum Business & Technology
Credits: 4
This project-based practicum provides students in both the Computer Information Technology and Business Management Bachelor of Applied Studies programs with a hands-on opportunity to apply their skills in real-world professional settings. Students will design and complete a supervised project or field experience aligned with their career interests. Whether in IT fields such as cybersecurity, data analysis, or software development, or in management areas such as organizational leadership, operations strategy, or business process improvement, the practicum emphasizes initiative, professionalism, and the integration of classroom learning with practical application, while fostering problem-solving, communication, and workplace readiness across both technical and managerial domains. A secondary goal of the practicum is to help students explore potential career paths and assess opportunities for an advanced internship, capstone, or industry certification experience.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

APST 695A - Integrative Capstone
Credits: 4
This integrative capstone course serves as the culminating experience for students in Business Management, Technology Management, and Computer Information Technology programs. It provides students the opportunity to synthesize and apply the knowledge, skills, and competencies gained throughout their program of study in a professional, project-based, or internship setting. Students will demonstrate their ability to analyze complex organizational and technological challenges, develop strategic solutions, and implement best practices aligned with their field of specialization and career goals. The course emphasizes the integration of management principles, innovation, and technology to address real-world problems across diverse industries.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

APST 705 - Grant Writing
Credits: 4
This course prepares participants to effectively write different types of grant narratives based on organizational need(s). Topics include the strategic purpose of grants, basic grant elements, effective grant-writing strategies, and grant management and stewardship. Projects may include a completed grant proposal, creation of grant management, and stewardship processes and tools.
Attributes: Writing Intensive Course
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-.
Equivalent(s): APST 515G, APST 615G
Grade Mode: Letter Grading

Arabic (ARBC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ARBC 401 - Elementary Arabic I
Credits: 4
This course introduces students to the language of Arabic and the culture of the Middle East. It teaches writing and pronunciation of Arabic letters and words, as well as a number of common phrases, such as greetings and cordial interactions. Both modern standard Arabic and colloquial Egyptian are taught. It also introduces students to basic aspects of Arabic culture and history.
Grade Mode: Letter Grading
Special Fee: Yes

ARBC 402 - Elementary Arabic II
Credits: 4
This course builds on skills of learning Arabic acquired in ARBC 401. It continues with the teaching of these skills, which are listening, reading, writing, and speaking. It expands the students' acquisition of grammar, and widens their familiarity with the Middle East culture. It teaches both modern Standard Arabic and colloquial Egyptian.
Attributes: Foreign Language Requirement
Prerequisite(s): ARBC 401 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ARBC 425 - Introduction to Arabic Culture
Credits: 4
Conducted in English. This course offers an introduction to Arabic culture and explores its historical, linguistic, social, religious, cultural, and artistic foundations. Students can expect to develop cultural awareness and communicative skills useful when interacting with people from the Arab world, in addition to critical analytical thinking skills through discussion of various Arabic cultural topics.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

ARBC 503 - Intermediate Arabic
Credits: 4
This intermediate level course builds on the skills of reading comprehension and the writing and speaking of Modern Standard Arabic that were acquired in first-year Arabic. It takes students to the next level of familiarity with, and the practice of, Arabic. It also puts a heavier weight on using the Egyptian dialect of Arabic in conversation.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Prerequisite(s): ARBC 402 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ARBC 504 - Intermediate Arabic
Credits: 4
This intermediate level course builds on the skills of reading and reading comprehension and the writing and speaking of Modern Standard Arabic that were acquired in Arabic 503. Students begin to read Arabic newspapers, websites, and other simple reading materials. An emphasis on using the Egyptian dialect of Arabic in conversation continues.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Prerequisite(s): ARBC 503 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ARBC 595 - Arabic Practicum
Credits: 2
Practical use of Arabic language and culture through special projects outside the classroom.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

ARBC 631 - Advanced Arabic I
Credits: 4
This advanced intermediate level course builds on the skills of reading and reading comprehension, and the writing and speaking, of Modern Standard Arabic that were acquired in ARBC 504. Students continue to read Arabic newspapers, websites and other materials, and bring their findings to share in class discussions. An even greater emphasis than in lower levels of Arabic, are placed on acquiring and practicing the Egyptian dialect of Arabic in class conversations.
Attributes: Foreign Language Requirement
Prerequisite(s): ARBC 504 with a minimum grade of D-.
Grade Mode: Letter Grading

ARBC 632 - Advanced Arabic II
Credits: 4
This advanced intermediate level course builds on the skills of reading and reading comprehension, and the writing and speaking, of Modern Standard Arabic. Students continue to read Arabic newspapers, websites and other materials, and bring their findings to share in class discussions. An even greater emphasis than in lower levels of Arabic, are placed on acquiring and practicing the Egyptian dialect of Arabic in class conversations.
Attributes: Foreign Language Requirement
Prerequisite(s): ARBC 631 with a minimum grade of D-.
Grade Mode: Letter Grading

ARBC 795 - Independent Study in Arabic
Credits: 1-4
Guided individual study. Topics selected by instructor and student in conference. Barring duplication of content, may be repeated for credit.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

Art History (ARTH)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ARTH 400 - Topics in Art History
Credits: 4
Art History will be presented thematically. At least three distinct chronological periods will be treated; students will develop research skills and give oral presentations. Topics will vary: "Art Writers: Their Sources and Their Effects;" "Rome from Romulus to the Fascists;" "Cults of the Original and Cultures of the Copy." Repeatable up to a maximum of 12 credits with different topics. May count towards Architectural Studies Minor if papers take the appropriate emphasis.
Attributes: FinePerformingArts(Discovery); Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 12 credits.
Equivalent(s): ARTS 400
Grade Mode: Letter Grading

ARTH 440A - From Digging to Digital: Preserving and Displaying the Past
Credits: 4
This course introduces the methods for the digital preservation of artifacts and the ethics of cultural conservation. Students will work with objects from the UNH museum to assess digital tools available to conservators, art historians, and archaeologists. We will explore photogrammetry, 3D modeling, virtual reality, web publishing software, and digital applications to study objects and preserve our cultural heritage. Discussion sections will address the social role of museums and international affairs.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): ARTS 440A
Grade Mode: Letter Grading

ARTH 444 - Mona Lisa to Much Ado About Nothing: An Introduction to Renaissance Culture
Credits: 4
What did Michelangelo and Shakespeare have in common? This course will read primary sources about the period called the Renaissance, which looked back to Greek and Roman paganism but which also launched Europe toward modernity due to its new emphasis on individual ambition and civic pride.
Attributes: FinePerformingArts(Discovery); Inquiry (Discovery); Writing Intensive Course
Equivalent(s): ARTS 444
Grade Mode: Letter Grading

ARTH 444B - Art and Money
Credits: 4
This course explores the relationship between art and money from a variety of perspectives. Topics will range from the art market boom in seventeenth-century Holland, to money as subject matter in twentieth-century art. How do we determine the value of art? How do markets influence taste? How do we define authenticity? What is at stake in the opposition between art and money, and can they be reconciled?.
Attributes: FinePerformingArts(Discovery); Inquiry (Discovery); Writing Intensive Course
Equivalent(s): ARTS 444B
Grade Mode: Letter Grading

ARTH 474 - Introduction to Architectural History
Credits: 4
Survey of representative buildings from the entire history of architecture with analysis of structure, form, and symbolic content, concentrating on major works such as pyramids, the Roman Pantheon, the Gothic cathedral, the Renaissance palace, the Baroque church, and the modern skyscraper. In addition to the overarching narrative of architectural history, further topics include materials and building technologies, design theories, aesthetic principles, and the role of the architect in society.
Attributes: Historical Perspectives(Disc)
Equivalent(s): ARTS 574
Grade Mode: Letter Grading

ARTH 480 - Introduction to Art History
Credits: 4
Analysis of the central forms and meanings of art history through intensive study of selected artists and monuments. Includes works of architecture, sculpture, painting, and the graphic arts. Topics will vary but might include the Parthenon, Chartres Cathedral, Michelangelo's Sistine Chapel ceiling. Rembrandt's self-portraits, Monet's landscapes, Picasso's Guernica, Frank Lloyd Wright's Falling water, Georgia O'Keeffe's abstractions, ukiyo-e prints, and Benin sculpture.
Attributes: FinePerformingArts(Discovery)
Equivalent(s): ARTS 480
Grade Mode: Letter Grading

ARTH 485 - Introduction to Global Art History
Credits: 4
What is art? Or, what does art do? In this course we will try to answer these questions by surveying works of art from a range of different cultures across the globe that represent tens of thousands of years of human history. The majority of our time will be spent studying non-western art and art created by historically marginalized artists and communities. This class will be divided into modules centralized around important themes in art history that will allow us to consider why art is made, how art is made, and why art is so important to human history.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

ARTH 501 - Introduction to Mediterranean Archaeology
Credits: 4
Survey of representative archaeological sites, architecture, and objects produced by the cultures surrounding the Ancient Mediterranean. The course will focus on the structure, form, and symbolic content, or sanctuaries, cities, tombs, housing, as well as material culture such as pottery and sculpture. In addition to the overarching narrative of the history of classical archaeology, further topics include cross-cultural influences, materials and building technologies, archaeological theory and practice, and aesthetic principles.
Attributes: World Cultures(Discovery)
Equivalent(s): CLAS 501
Grade Mode: Letter Grading

ARTH 502 - Ancient Pompeii and the Bay of Naples
Credits: 4
This course analyzes the cultural development of Pompeii and adjacent sites buried by the eruption of Vesuvius in AD 79. The aim is to understand the architectural layout and material culture of the cities, their development over time, as well as understand how social norms, politics and cultural influences shaped the appearance and the built environment in the seven hundred years that Pompeii existed prior to its destruction. Through the lens of the surviving art, architecture, and material culture students will learn about everyday life in ancient Pompeii and how different social classes interacted in the city.
Attributes: World Cultures(Discovery)
Equivalent(s): CLAS 502
Grade Mode: Letter Grading

ARTH 583 - Baroque Art: Realism, Caricature, Shock
Credits: 4
The last period of Italian world prominence in the visual arts, the Baroque witnessed a shift of artistic power toward Spain, France, and the Netherlands. The private collecting of pictures, controversies over the legitimacy of religious images, the exploration of etching, pastels, and monotypes, and the serious pursuit of less august subject matter for the visual arts all served to separate Baroque art from its esteemed predecessor, the Renaissance. Bernini, Borromini, Caravaggio, Velazquez, Rembrandt, Rubens, and Poussin are among the artists to be studied.
Attributes: Writing Intensive Course
Equivalent(s): ARTH 683
Grade Mode: Letter Grading

ARTH 600 - Internship in Art History
Credits: 1-4
Elective only. Cannot be used to fulfill art history requirements.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ARTS 600
Grade Mode: Letter Grading

ARTH 674 - Greek Art and Architecture
Credits: 4
Ancient Greece has long been a source of emulation and inspiration. From the legendary Bronze Age palaces of Mycenae and Knossos, through the classical ideas of the city state and its ultimate diffusion through Alexander the Great, this course explores ancient Greek culture through the lens of its art and architecture. We will consider the monuments and surviving artifacts that have influenced art and architecture through the ages and continue to shape the modern world.
Attributes: Writing Intensive Course
Equivalent(s): ARTS 674
Grade Mode: Letter Grading

ARTH 678 - Romanesque and Gothic Art
Credits: 4
From the fall of the Roman Empire to the fourteenth century, through plague and destruction, glory and honor, heaven and hell, this course tackles the culmination of medieval artistic development, focusing especially on major architectural monuments and their sculptural programs. Treating also the art of tombs, relics, manuscripts, and devotional painting. Connections between social, religious, and art history are emphasized.
Attributes: Writing Intensive Course
Equivalent(s): ARTS 678
Grade Mode: Letter Grading

ARTH 681 - Early Renaissance Art
Credits: 4
How did Europe recover from the Black Death in 1348? How was it possible for Florence to become the center of western creativity both before and after that catastrophe? How did Renaissance art develop elsewhere during the fourteenth and fifteenth centuries? Was was "primitive" about Botticelli?.
Attributes: Writing Intensive Course
Equivalent(s): ARTS 681
Grade Mode: Letter Grading

ARTH 682 - The High Renaissance
Credits: 4
Examines the trajectory from Leonardo to the deaths of Michelangelo and Titian: painting, sculpture, architecture, and works on paper.
Attributes: Writing Intensive Course
Equivalent(s): ARTS 682
Grade Mode: Letter Grading

ARTH 686 - Sex and Sensuality in 18th-Century Art
Credits: 4
European art of the "long" eighteenth century (1680-1815) experienced radical shifts in aesthetic, social, and political orientation: from the splendors of absolutism to the austere neoclassicism of revolutionary art. This course explores painting and sculpture (and works in other media) in relation to the development of a public sphere, the emergence of individualism, the invention of personal domestic comfort, the introduction of women to artistic power, the scientific revolution, and the birth of global consumer culture.
Attributes: Writing Intensive Course
Equivalent(s): ARTS 686
Grade Mode: Letter Grading

ARTH 688 - Histories of Late 19th & 20th Century European Modernism
Credits: 4
An examination of European and American art from Symbolism to Surrealism, from the 1890s to World War II. The course focuses on a series of topics related to the political, social, scientific, and artistic upheavals of the era. Among the topics to be considered are Gauguin and "Primitivism"; Picasso, Cubism, and film; the Bauhaus and Utopian Architecture; Modernist Philosophy; Surrealism and Freud; and the fate of art under Hitler and Stalin.
Attributes: Writing Intensive Course
Equivalent(s): ARTS 688
Grade Mode: Letter Grading

ARTH 694 - Vision and Modernity: From Panorama to Early Film
Credits: 4
The course examines the emergence of modern visual culture between the end of the 18th century and the beginning of the 20th century. It tracks the development of new technologies and conditions of viewing—from the panorama to photography to early cinema—and situates those developments in relation to larger social, intellectual, and cultural shifts in our conceptions of subjectivity, collectivity, and the mechanics of optical perception. The visual material at the center of our discussions will include nineteenth- and twentieth-century photographs, as well as paintings, prints, film, and other forms of visual entertainment and ephemera.
Attributes: Writing Intensive Course
Equivalent(s): ARTS 694
Grade Mode: Letter Grading

ARTH 695 - Topics in Art History
Credits: 4
Topics and prerequisites to be announces before registration. May be repeatable twice with different topics.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ARTS 695
Grade Mode: Letter Grading

ARTH 697 - Topics in Asian Art
Credits: 4
A thematic study of the major artistic achievements in India, China, and/or Japan from pre-history to the twentieth century. Works of art in various media, including painting, sculpture, ceramics, calligraphy, prints, architecture, and gardens, will be examined in relation to philosophical concepts and to their cultural/historical contexts. May be repeated twice with different topics.
Attributes: Writing Intensive Course
Equivalent(s): ARTS 697
Grade Mode: Letter Grading

ARTH 699 - Museum Studies
Credits: 4
Introduction to the history and practice of American museums, including their purposes, organization, interpretation, policies and practices. Use of the UNH Museum of Art with occasional visits to other museums and art conservators. This course may not be used by studio art/art ed or B.F.A majors to fulfill the art history requirements.
Attributes: Writing Intensive Course
Equivalent(s): ARTS 699
Grade Mode: Letter Grading

ARTH 795 - Understanding Art History: An In-Depth Overview
Credits: 4
Art history is by its nature interdisciplinary, and so this course, while it is intended as the capstone for art history majors, also welcomes voices (and eyes) from other disciplines. We will look at a variety of case studies addressing works of art and architecture, and students will research their own topics, in an effort to understand better the strengths and weaknesses of art historical thought, both past and present.
Attributes: Writing Intensive Course
Equivalent(s): ARTS 795
Grade Mode: Letter Grading

ARTH 796 - Independent Study: Art History
Credits: 1-4
Open to highly qualified juniors or seniors who have completed the advanced level courses. May be repeated for a maximum of 8 credits. Written proposal required and permission from supervising faculty member.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ARTS 796
Grade Mode: Letter Grading

ARTH 799 - Seminar in Art History
Credits: 4
Topics and prerequisites to be announced before registration. May be repeated with permission of instructor.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ARTS 799
Grade Mode: Letter Grading

Arts & Culture (ART) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ART 401 - Introduction to Drawing
Credits: 4
This studio art course fosters a hands-on approach to basic drawing and composition. Students explore, comprehend, and employ the basic elements and principles of art, use various graphic media, and become familiar with the vocabulary, concepts, and techniques of drawing. Projects emphasize composition and guide students toward mastering the skills needed to produce an effective and expressive drawing.
Attributes: FinePerformingArts(Discovery); Human Thought Exp (Gen Ed)
Equivalent(s): ARTS 501G
Grade Mode: Letter Grading

ART 403 - Introduction to Watercolor
Credits: 4
This is a course for all levels of students, including students with no previous studio art experience. The course introduces students to a variety of approaches to the watercolor medium through the use of hands-on experience, demonstrations, instructor and peer feedback, and discussions. Students will develop watercolor painting skills and visual literacy through recognizing and practicing common watercolor techniques leading to a portfolio of work by the end of the term.
Attributes: FinePerformingArts(Discovery); Human Thought Exp (Gen Ed)
Equivalent(s): ARTS 503G
Grade Mode: Letter Grading

ART 512 - Fundamentals of Design
Credits: 4
This course introduces the design elements, principles, and skills needed to succeed in the graphic design industry. Students will have the opportunity to learn the fundamentals of professional layout using Adobe Creative Cloud while demonstrating an understanding of composition, color, typography, vectors, and bitmap creation, along with other essential attributes of graphic design. The design process, design as visual communication, and the designer's role in concept development for media, web, and video will also be emphasized.
Attributes: FinePerformingArts(Discovery); Human Thought Exp (Gen Ed)
Equivalent(s): ARTS 504G, ARTS 512G
Grade Mode: Letter Grading

ART 515 - Digital Photography
Credits: 4
This course explores the fundamentals of digital photography. It is structured to help the student master the technical tools of digital photography and image-editing software while cultivating the ability to perceive and understand the world visually and artistically. Students practice constructively critiquing their own work and that of others. This course also examines the unique place photography has within the context of other art forms, such as painting, cinema, music, and literature. In order to meet the learning outcomes of this course, students must have access to a standalone digital camera (DSLR) for required use in the class.
Attributes: Environment,TechSociety(Disc); Human Thought Exp (Gen Ed)
Equivalent(s): ARTS 515G
Grade Mode: Letter Grading

ART 544 - Special Topics: Lower Level
Credits: 4
A study of current and variable topics in Arts and Culture. Course content changes from term to term. Lower level.
Equivalent(s): ARTS 544G
Grade Mode: Letter Grading

ART 550 - Art History: Western World
Credits: 4
The primary goal of this course is to develop an appreciation of the important role that the arts and the individual artist have played through the ages. The course examines the formal qualities and technical achievements of important works from each major period in Western art, as well as the historical and cultural context in which they were created.
Attributes: FinePerformingArts(Discovery); Human Thought Exp (Gen Ed)
Equivalent(s): ARTS 550G
Grade Mode: Letter Grading

ART 644 - Special Topics: Upper Level
Credits: 1-4
A study of current and variable topics in Arts and Culture. Course content changes from term to term. Upper level.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): ARTS 644G
Grade Mode: Letter Grading

Arts/History & Studio (ARTS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ARTS 501 - Introductory Ceramics
Credits: 4
Theory and practice of basic ceramics; includes all methods of basic construction, decoration, glazing, and kiln firing. Emphasis on each individual's perceptual development. Lab.
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 510 - Principles of Design
Credits: 4
An introduction to the principles of design. Students will explore the foundational elements and processes of design principles found in the development of the fine and commercial arts. Lectures will explore the history of design concepts and movements, while studio/lab sessions will enable students to develop their own projects and animation designs. Students will develop basic proficiencies in design software programs.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 515 - Principles of Interior Design
Credits: 4
Students will explore the foundational elements and processes in the design of interior spaces. Lectures will explore the history of interior design; the fundamentals of workign with materials, objects, textures, colors and lighting; how to create plans, maps and diagrams; and how to work with clients. Studio/lab sessions will enable students to develop their own projects and designs. Students will develop proficiencies in related software programs.
Grade Mode: Letter Grading

ARTS 520 - Principles of Architectural Design
Credits: 4
An entry level architectural design studio. Course assignments feature hand drafting, hand rendering, model building, and project presentations while developing skills in verbal, written, and graphic communication. Drafting, hand-rendering, and model making materials and tools are required for this course. Knowledge of CAD or 3-D computer modeling is required.
Grade Mode: Letter Grading

ARTS 522 - Topics in Architecture Design Studio
Credits: 4
Topics in Architectural Design Studio presents foundational architectural design concepts through a rotation of courses. Each course will present unique concepts to contextualize foundational design skills and processes. Concepts such as the relationship between the built and natural environment, sustainable and regenerative design and topics in the use of new technologies in design are among some of the topics that will be considered through a rotation of Workshop course offerings. As students develop basic skills in drafting, model making and design thinking they will focus on addressing the challenges and concepts unique to the topic presented.
Repeat Rule: May be repeated for a maximum of 12 credits. May be repeated up to 3 times.
Grade Mode: Letter Grading

ARTS 525 - Introductory Woodworking
Credits: 4
This course introduces students to the process of designing and building furniture with wood as the primary material. Students think creatively to brainstorm and develop their own, individual designs and use a variety of hand tools, power tools, and machines to build their objects. This course is a prerequisite to upper level woodworking and furniture design workshop courses, which subsequently investigate more sophisticated furniture concepts and woodworking techniques. Studio.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 532 - Introductory Drawing
Credits: 4
This course is an introduction to the basic principles of studio drawing. Students work towards mastering the technical skills to produce drawings from observation, a working knowledge of the historical time line in drawing, and insight into the complexities of the creative process. A variety of materials are explored, pencil, charcoal, ink and collage. Art historical and contemporary drawing practices are shown in lectures and books to amplify the concepts introduced in the daily studio work.
Attributes: FinePerformingArts(Discovery)
Equivalent(s): ARTS 532H
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 532H - Honors/Introductory Drawing
Credits: 4
This course is an introduction to the basic principles of studio drawing. Students work towards mastering the technical skills to produce drawings from observation, a working knowledge of the historical time line in drawing, and insight into the complexities of the creative process. A variety of materials are explored, pencil, charcoal, ink and collage. Art historical and contemporary drawing practices are shown in lectures and books to amplify the concepts introduced in the daily studio work.
Attributes: FinePerformingArts(Discovery); Honors course
Equivalent(s): ARTS 532
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 535 - Introduction to Printmaking: Monotypes and Collagraphs
Credits: 4
Studio arts course in Printmaking. This course is an introduction to monotype and collagraph printmaking. Distinct from intaglio and relief printmaking, monotypes and collagraphs develop unique image prints with more direct application of ink and plate construction. Students will explore these concepts and techniques through the construction of plate surfaces and direct ink application. Course instruction includes: lectures, demonstrations, class critiques and direct, hands-on practice.
Grade Mode: Letter Grading

ARTS 536 - Introduction Printmaking: Intaglio
Credits: 4
Study of intaglio printmaking techniques, including etching, dry point, and engraving. Lab.
Prerequisite(s): ARTS 532 with a minimum grade of C-.
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 538 - Introduction to Printmaking: Relief
Credits: 4
This class is an introduction to printmaking as an art form with emphasis on relief printing techniques. The history of print, both as a tool for communication and as an art medium, will be discussed. While this studio class will be comprised of project based, hands-on learning – lecture, live demos and the practice of documenting one's process in a process notebook will also be included. Students will learn how to correctly use wood carving tools, oil-based ink and its modifiers, as well as safe handling of etching presses. We will be using nontoxic best-practices for using, storing and cleaning up printmaking ink as well as nontoxic studio maintenance. Students will engage with the relief printmaking techniques of block-print pattern design, multi-block woodcuts using a key block, 4-color reduction linocuts and printing with found objects. Each assignment will build on the last and all will include strategies for color printing, registration techniques and what it means to create an edition. They will also acquire skills in color separation, layering transparent colors to create a full spectrum, graphic depth and compositional considerations, planning a project in steps and safe studio practices. At the end of the semester students will have a solid foundation in the process of relief printmaking – as well as a buildable toolbox of skills that can be applied to other artistic mediums.
Grade Mode: Letter Grading

ARTS 546 - Painting Design I: Perceptual Painting and Color Theory
Credits: 4
Color is the central formal issue in painting. This course explores in some detail all basic aspects of color, introducing color terms and examining the meaning of color contrast. Students become familiar with the color wheel and perform color-mixing assignments. Ideas about color are related to paintings done in class based on a variety of subjects. Students receive training on the essential vocabulary of color (as well as materials, techniques, etc.). Lectures on great colorist, critiques and outside assignments are also featured as part of the studio routine of this course.
Prerequisite(s): ARTS 532 with a minimum grade of C-.
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 551 - Introduction to Darkroom Photography
Credits: 4
This studio course introduces the fundamentals of photographic practice. Students learn technical aspects of exposure, developing and printing in the darkroom as they explore and respond to the visual qualities of the medium. The format includes class demonstrations, lab work, field assignments and critiques. Manual 35mm film camera will be provided.
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 552 - Introductory Digital Photography
Credits: 4
Introduction to the basic principles and applications of digital photography. The philosophical and technical relationship between camera and computer is an integral part of today's digital literacy needs. Techniques learned correspond to traditional darkroom processes and include creative shooting, editing and image manipulation. The students uses new skills and techniques towards developing a unique artistic vision. Digital camera required (point and shoot or DSLR).
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 567 - Introductory Sculpture
Credits: 4
Introduces the beginning student to the theory and practice of designing three-dimensional compositions using a series of progressive assignments. The student develops a practical understanding of sculptural elements, including line, form, space, mass, and plane. Multiple materials are explored including clay, plaster, wire and wood. This course is a prerequisite to upper level sculpture workshop courses, which subsequently focus on in-depth investigations of a particular topic.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 596 - Special Topics in Studio Art
Credits: 4
Introductory level topics to be announced before registration. Topics can be either a lecture or studio course. May be repeated with different topics.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

ARTS 598 - An Artist's Life
Credits: 4
This course looks at the visual arts from the standpoint of artists. Biographies of artists and their environments are emphasized. Studio methods, professional activities, and ideas of historical and contemporary artists are also studied. The semester includes readings, discussions, and field trips. The course encourages students to develop ideas about the relationship of the visual arts to other disciplines in fine arts, literature and the sciences.
Attributes: Inquiry (Discovery)
Grade Mode: Letter Grading

ARTS 600 - Internship in Studio Art
Credits: 1-4
Internship can be taken for university elective credits or can be applied to a major concentration requirement with approval.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ARTS 601 - Ceramics Workshop
Credits: 4
Application of new ceramic materials and techniques, with emphasis on ideas and their expression through form and content. Experimentation encouraged. Specific focus to be announced each semester. Lab.
Prerequisite(s): ARTS 501 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 610 - Principles of Typography
Credits: 4
Introduction to the principles of typography. Students will explore the foundational elements and processes of typographic principles used in graphic design and publishing. Lectures will explore the history of typographic concepts and movements, while studio/lab sessions will enable students to develop their own projects and typographic designs. Students will develop basic proficiencies in design software programs.
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 611 - Animation and Motion Design
Credits: 4
This course is an introduction to animation and motion design, and will cover the history and aesthetics of animation and motion design, ways to think in time and space, techniques and methods for planning motion sequences, how to create and use storyboards and scripts, how to use live action video footage in your designs, and the use of motion-specific industry-standard software tools (AfterEffects, Flash, Premier and others).
Grade Mode: Letter Grading

ARTS 612 - Interaction & Game Design
Credits: 4
This course is an exploration of the principles of interaction design as they relate to physical and digital space, with a focus on designing user-centered artifacts, games, and experiences. Theoretical concepts like ethnography, user-testing, and the use of mapping in design will be explored. We will also examine the landscape of technology as it relates to interaction, and the use of appropriate tools and software to create prototypes and functioning digital designs.
Grade Mode: Letter Grading

ARTS 613 - Design and Place
Credits: 4
This course is an exploration of designing objects and experiences for spaces and places, both physical and digital. This branch of design is known as experiential and/or environmental graphic design. Lectures will focus on wayfinding, sense making, accessibility and universal design, and others. Studio work will engage students in creating projects like signage systems, exhibition design, packaging and design for retail spaces, and 3-dimensional digital spaces.
Grade Mode: Letter Grading

ARTS 614 - Design and People
Credits: 4
An exploration of designing with and for people and communities. How do designers create work for specific audiences, and how do they collaborate with people to make useful designs? Lectures will explore communication theory, user observation and ethnography, participatory design, modes of persuasion, system design, sustainability, how to design for niche audiences, and others. Studio work will focus on connecting students to specific audiences to create design projects that solve problems or address social issues.
Grade Mode: Letter Grading

ARTS 625 - Wood/Furniture Design Workshop
Credits: 4
In this studio course students learn how to design and build furniture and non-functional objects using a variety of techniques, hand tools, and machines. Emphasis is on challenging and exploring creativity to examine preconceived ideas about what furniture forms should look like while developing a solid understanding of various techniques.
Prerequisite(s): ARTS 525 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 636 - Printmaking Workshop
Credits: 4
Emphasis on development of the individual's imagery in lithography and/or intaglio, including an introduction to multicolor printmaking.
Prerequisite(s): ARTS 536 with a minimum grade of C- or ARTS 537 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

ARTS 640 - Drawing Workshop
Credits: 4
This is a studio course in drawing. This course will offer a range of conceptual, formal, material and technical content on a rotating basis. Each workshop will present a topic through which students will engage a variety of historical and cultural expressions as they develop their own work.
Prerequisite(s): ARTS 532 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 12 credits. May be repeated up to 3 times.
Grade Mode: Letter Grading

ARTS 651 - Photography Workshop
Credits: 4
Individualized projects involving creative methods, including color, manipulative, and documentary techniques. Students provide their own cameras. Lab.
Prerequisite(s): ARTS 551 with a minimum grade of C- or ARTS 552 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 660 - Painting Workshop
Credits: 4
This is a studio course in painting. This course will offer a range of conceptual, formal, material and technical content on a rotating basis. Each workshop will present a topic through which students will engage a variety of historical and cultural expressions as they develop their own work.
Prerequisite(s): ARTS 546 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 12 credits. May be repeated up to 3 times.
Grade Mode: Letter Grading

ARTS 667 - Sculpture Workshop
Credits: 4
Design and production of sculpture focusing on various materials and techniques and how they relate to composition and content. Emphasis on understanding visual language while developing an individual style. Lab.
Prerequisite(s): ARTS 567 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 780 - Advanced Studio Seminar
Credits: 4
Course provides a framework for individual art/design projects or to explore a specific topic within art/design, with a focus on interdisciplinary and/or hybrid making practices. The course will also cover professional practices within art/design (including portfolio development, social media practices, understanding job descriptions, creative resumes, and more). In-class sessions will include lectures about the creative process and professional practices, peer workshopping of project proposals and progress, critiques of work in progress, and discussions of related topics. Course is limited to studio art majors and minors; other advanced students may elect with instructor's permission. Any 3 studio arts (ARTS) courses, where 2 must be at the 600 level or above, required prior to taking this course.
Grade Mode: Letter Grading

ARTS 791 - Art Education (Elementary)
Credits: 4
Children's creative growth as revealed through their visual expression. Development of elementary art education programs with emphasis on objectives, methods, materials and techniques to foster creativity. EDUC 500 is suggested to take prior to this course.
Grade Mode: Letter Grading

ARTS 792 - Art Education (Secondary)
Credits: 4
The creative process in the visual arts in relation to the development and skills of middle and high school students in the public schools; mechanics of beginning and maintaining a secondary art program; exploring resources for art education programs on the secondary level. EDUC 500 is suggested to take prior to this course.
Grade Mode: Letter Grading

ARTS 796 - Independent Study: Studio Art
Credits: 1-8
Open to highly qualified juniors or seniors who have completed the advanced level courses. May be repeated for a maximum of 12 credits with no more than 8 credits in a single medium. Same term multi-enrollment in different media only. A) Photography, B) Sculpture, C) Drawing, D) Painting, E) Printmaking, F) Watermedia, G) Design, H) Architectural Design, J) Ceramics, K) Wood Design. Special fee in some mediums. Written proposal and permission required.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading
Special Fee: Yes

ARTS 798 - Seminar/Senior Thesis
Credits: 4-8
Readings and discussions oriented toward the intellectual premises of art. Culminates in mounting an exhibition of the student's work. Required of all students in the B.F.A program. Other advanced students may elect with instructor's permission. A year-long course; an IA grade (continuous course) will be given at the end of the first semester. Lab. B.F.A. majors must take 8 credits total. Special fee for Photography students.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading
Special Fee: Yes

Behavioral Science (BEHS) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

BEHS 445 - Homeland Security and Emergency Management
Credits: 4
This course presents an overview of the homeland security and emergency management field and enables students entering the profession or expanding their roles to function effectively given a broad array of emergency management issues. This course provides students with a broad view of issues that focus on policy considerations and align with the five National Preparedness System mission areas of prevention, protection, mitigation, response, and recovery. Students learn critical concepts such as the Department of Homeland Security all-hazards approach of emergency management, risk prevention, counter-terrorism, and consequence management and mitigation. This course takes a behavioral science risk-based approach, assessing capabilities and identifying gaps within existing emergency management programs. This approach is instrumental to planning future homeland security and emergency management programs, which facilitate our nation's ability to improve emergency management.
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOC 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D- or MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-.
Equivalent(s): BEHS 505G
Grade Mode: Letter Grading

BEHS 510 - National Incident Management Systems (NIMS)
Credits: 4
This course examines the comprehensive approach guiding the whole community - all levels of government (federal, state, county, and town), nongovernmental organizations (NGOs), and the private sector - to work together seamlessly to prevent, protect against, mitigate, respond to, and recover from the effects of emergency incidents. The course provides students with an understanding of National Incident Management Systems (NIMS) concepts, principles, and components.
Prerequisite(s): BEHS 445 with a minimum grade of D- or BEHS 505G with a minimum grade of D-.
Equivalent(s): BEHS 510G
Grade Mode: Letter Grading

BEHS 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in Behavioral Science. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): BEHS 544G
Grade Mode: Letter Grading

BEHS 595 - Practicum in Behavioral Science
Credits: 4
This practicum is an entry-level field experience designed to assist behavioral science majors in exploring career and vocational settings in which they can use and apply their behavioral science knowledge and skills. The nature of the practicum is exploratory, involves extensive initiative in designing and implementing the practicum, and is conducted under the supervision of the practicum instructor. A supplementary objective of the practicum is to explore and assess possibilities for settings and situations in which the student may engage in an upper-level behavioral science internship. Earlier registration deadlines may apply.
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOC 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D- or CRIM 410 with a minimum grade of D-.
Equivalent(s): BEHS 540G
Grade Mode: Letter Grading

BEHS 610 - Community Emergency Response
Credits: 4
The focus of this course is on disaster preparedness and training and organizing teams that can support communities during disasters. The course provides disaster response process knowledge, such as fire safety, light search and rescue, and disaster medical operations. Community emergency response knowledge is used to develop strategies to protect families, neighbors, and co-workers if a disaster occurs. How to plan, execute, and evaluate disaster preparedness desktop exercises will be addressed.
Prerequisite(s): BEHS 445 with a minimum grade of D- or BEHS 505G with a minimum grade of D-.
Equivalent(s): BEHS 610G
Grade Mode: Letter Grading

BEHS 644 - Special Topics: Upper Level
Credits: 1-4
A study of current and variable topics in Behavioral Science. Course content changes from term to term. It is expected that the learner will have prior coursework or experience in the subject area.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): BEHS 644G
Grade Mode: Letter Grading

BEHS 665 - Disaster Management
Credits: 4
This course provides a comprehensive overview of emergency management principles as they relate to fire departments, emergency services, community stakeholders, and partner agencies. Students will explore the five phases of emergency management – mitigation, preparedness, protection, response, and recovery – and examine the roles of key agencies and stakeholders in each phase. Emphasis is placed on understanding the legal framework governing emergency operations, analyzing community vulnerabilities, coordinating resources, and employing effective communication strategies.
Prerequisite(s): BEHS 445 with a minimum grade of D- or BEHS 505G with a minimum grade of D- or FSA 605 with a minimum grade of D- or FSA 605G with a minimum grade of D-.
Equivalent(s): BEHS 617G
Grade Mode: Letter Grading

BEHS 675 - Terrorism: Domestic and International
Credits: 4
This course is designed to acquaint students with the major issues in the growing threat of domestic and global terrorism. Topics include an overview of the history and development of terrorism, types of terrorism, terrorist groups, the psychology of terrorism, the structure and dynamics of terrorist groups, terrorists' techniques, financing of terrorism, the media and terrorism, legal issues, and terrorism of the future.
Equivalent(s): BEHS 615G
Grade Mode: Letter Grading

BEHS 695 - Internship in Behavioral Science
Credits: 4
This course is a field-based internship designed to develop and hone the practical application skills of a Behavioral Science major. Students apply for an internship at a self-selected site and negotiate the terms of the internship experience with a site supervisor under the general auspices of their faculty mentor. The internship requires documented evidence of eighty hours of supervised experience and practice in a field setting where behavioral science-related knowledge and skills are applied. NOTE: It is recommended that students have completed the majority of upper level course work in their major prior to enrolling in this course. Registration for this course is by permission of Academic Affairs. Earlier registration deadlines may apply.
Equivalent(s): BEHS 640G
Grade Mode: Letter Grading

Biochemistry, Molecular & Cellular Biology (BMCB)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

BMCB 501 - Biological Chemistry
Credits: 4
Survey of the molecular basis of life with a focus on the mechanisms of biochemical reactions in metabolic pathways, beginning with an overview of functional groups and organic reactions relevant for living organisms. Bioenergetics of carbohydrate, lipid, and nitrogen metabolic pathways.
Prerequisite(s): (CHEM 403 with a minimum grade of D- and (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D-)) or CHEM 411 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken BMCB 658, BMCB 751, BMCB 752.
Grade Mode: Letter Grading

BMCB 605 - Principles of Cell Biology
Credits: 4
Cell and developmental biology of multicellular eukaryotic organisms. Structure and function of major cellular compartments; mechanisms of cellular communication and dynamics; embryonic development. Special topics: subcellular organization and function; membrane biogenesis; signal transduction; mitogenesis; apoptosis; autophagy; tumor suppressors and cell cycle regulation; cytokinesis; cytoskeletal dynamics; cellular shape and motility; stem cell biology; organogenesis; morphogenesis and patterning.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BMS 507 with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and ((CHEM 403 with a minimum grade of D- and (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D-)) or CHEM 405 with a minimum grade of D-).
Equivalent(s): BIOL 605, BSCI 735
Grade Mode: Letter Grading

BMCB 658 - General Biochemistry
Credits: 3
Comprehensive, introductory course emphasizing the cellular metabolism and the structure and function of proteins, nucleic acids, carbohydrates, and lipids.
Co-requisite: BMCB 659
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D- or BMS 507 with a minimum grade of D- and ((CHEM 545 with a minimum grade of D- or CHEM 547 with a minimum grade of D- or CHEM 651 with a minimum grade of D- and (CHEM 546 with a minimum grade of D- or CHEM 548 with a minimum grade of D- or CHEM 652 with a minimum grade of D-).
Equivalent(s): BMCB 658A
Mutual Exclusion: No credit for students who have taken BMCB 501.
Grade Mode: Letter Grading

BMCB 658A - General Biochemistry
Credits: 3
Comprehensive, introductory course emphasizing the cellular metabolism and the structure and function of proteins, nucleic acids, carbohydrates, and lipids. This course is intended for programs that do not require a biochemistry laboratory.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D- or BMS 507 with a minimum grade of D-) and ((CHEM 545 with a minimum grade of D- or CHEM 547 with a minimum grade of D- or CHEM 651 with a minimum grade of D-) and (CHEM 546 with a minimum grade of D- or CHEM 548 with a minimum grade of D- or CHEM 652 with a minimum grade of D-)).
Equivalent(s): BMCB 658
Mutual Exclusion: No credit for students who have taken BMCB 501.
Grade Mode: Letter Grading

BMCB 659 - General Biochemistry Lab
Credits: 2
Structured laboratory experiments that provide training in analytical and preparative techniques fundamental to modern biochemistry and molecular biology.
Co-requisite: BMCB 658
Equivalent(s): BCHM 659, BMCB 659W
Grade Mode: Letter Grading
Special Fee: Yes

BMCB 659W - General Biochemistry Lab
Credits: 2
Structured laboratory experiments that provide training in analytical and preparative techniques fundamental to modern biochemistry and molecular biology.
Co-requisite: BMCB 658
Attributes: Writing Intensive Course
Equivalent(s): BCHM 659, BMCB 659
Grade Mode: Letter Grading
Special Fee: Yes

BMCB 751 - Principles of Biochemistry I
Credits: 4
In-depth survey of biochemistry: macromolecular structure; structure and function of proteins, nucleic acids, carbohydrates, and lipids; introduction to metabolic pathways.
Prerequisite(s): (CHEM 547 with a minimum grade of D- and CHEM 548 with a minimum grade of D-) or (CHEM 651 with a minimum grade of D- and CHEM 652 with a minimum grade of D-).
Mutual Exclusion: No credit for students who have taken BMCB 501.
Grade Mode: Letter Grading

BMCB 752 - Principles of Biochemistry II
Credits: 4
In-depth survey of biochemistry: metabolism of amino acids, nucleotides, carbohydrates and lipids; synthesis and regulation of macromolecules; molecular biology of the eukaryotic cell.
Prerequisite(s): BMCB 751 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken BMCB 501.
Grade Mode: Letter Grading

BMCB 753 - Cell Culture
Credits: 5
Principles and technical skills fundamental to the culture of animal and plant cells, tissues, and organs. Introduction to the techniques of sub-culturing, establishing primary cultures, karyotyping, serum testing, cloning, growth curves, cryopreservation, hybridoma formation and monoclonal antibody production, and organ cultures. Application of cell culture to contemporary research in the biological sciences. Lab.
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-.
Equivalent(s): ANSC 751, MICR 751, PBIO 751
Grade Mode: Letter Grading
Special Fee: Yes

BMCB 754 - Molecular Biology Research Methods
Credits: 5
Theory and application of current technologies to manipulate DNA. Hands-on research experience that includes DNA isolation and quantitation methods, cloning, PCR, DNA sequencing, and analysis of gene products. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): GEN 604 with a minimum grade of D-.
Equivalent(s): BCHM 754, BSCI 765, GEN 754, PBIO 754
Grade Mode: Letter Grading
Special Fee: Yes

BMCB 755 - Protein Biochemistry Laboratory
Credits: 5
Application of modern approaches to the characterization and purification of proteins. Emphasis on recombinant protein production and purification, analytical techniques for characterization of proteins, enzyme kinetics, and molecular visualization of protein structure.
Attributes: Writing Intensive Course
Prerequisite(s): BMCB 658 with a minimum grade of D- or BMCB 751 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

BMCB 760 - Pharmacology
Credits: 4
Introduction to the basic principles and fundamental concepts of pharmacology, with a focus on molecular mechanisms and pathological basis of therapeutics and their curative effects. Topics include: foundations of pharmacology including pharmacodynamics and pharmacogenomics; drugs affecting other systems; chemotherapeutic drugs.
Prerequisite(s): BMCB 658 with a minimum grade of D- or BMCB 751 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken BSCI 680.
Grade Mode: Letter Grading

BMCB 763 - Biochemistry of Cancer
Credits: 4
Evaluation of the hallmarks of cancer, including molecular mechanisms of carcinogenesis, roles of oncogenes and dysregulated cell development, function and metabolism, tumor immunology, and the biological basis of cancer therapy.
Prerequisite(s): (BMCB 658 with a minimum grade of D- or BMCB 751 with a minimum grade of D-) and BMCB 605 with a minimum grade of D-.
Equivalent(s): BCHM 763
Grade Mode: Letter Grading

BMCB 790 - Undergraduate Teaching Experience
Credits: 1-4
Provide academic support to graduate teaching assistants or faculty in preparing, presenting, and executing Biochemistry, Molecular and Cellular Biology lectures or labs.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

BMCB 794 - Protein Structure and Function
Credits: 4
Analysis of how the three-dimensional architecture of soluble and membrane proteins contributes to their biochemical function; methods for determining the structure of proteins; protein folding; protein targeting; mechanisms of enzyme catalysis. Computer resources used for protein modeling and structural prediction.
Prerequisite(s): BMCB 658 with a minimum grade of D- or BMCB 751 with a minimum grade of D- or BMCB 658A with a minimum grade of D-.
Grade Mode: Letter Grading

BMCB 795 - Investigations in Molecular and Cellular Biology
Credits: 1-4
Advanced research or scholarly projects developed and conducted under the supervision of a faculty member. Provides the opportunity to apply advanced knowledge and techniques of the major to a specific problem or question.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): BCHM 795, BCHM 795W, BMCB 795W
Grade Mode: Letter Grading

BMCB 795W - Investigations in Molecular and Cellular Biology
Credits: 1-4
Advanced research or scholarly projects developed and conducted under the supervision of a faculty member. Provides the opportunity to apply advanced knowledge and techniques of the major to a specific problem or question.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): BCHM 795, BCHM 795W, BMCB 795
Grade Mode: Letter Grading

BMCB 799 - Senior Thesis
Credits: 1-4
Independent research project under the direction of a faculty sponsor for seniors in biochemistry, molecular and cellular biology. Final product is a written thesis. One or two semesters.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): BCHM 699, BCHM 799, BCHM 799H, BMCB 799H
Grade Mode: Letter Grading

BMCB 799H - Honors Senior Thesis
Credits: 1-4
Independent research project under the direction of a faculty sponsor for seniors in biochemistry, molecular and cellular biology and in the Honors Program. Final product is a written thesis. One or two semesters.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): BMCB 799
Grade Mode: Letter Grading

Biological Science (BSCI)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

BSCI 401 - The Secret Lives of Whales
Credits: 4
The evolution and classification of whales living in their global ocean ecosystem will be investigated along with the influence and impact of humans on whale populations throughout history. Current research methods used to perform whale research will be presented. The implementation and current status of the effects of regulation, enforcement, management on the conservation of whale populations will be discussed. The impact of climate change, pollution and ocean water quality will be investigated.
Attributes: Biological Science(Discovery)
Grade Mode: Letter Grading

BSCI 410 - Contemporary Health Issues
Credits: 4
This course exposes students to the three major dimensions of health - physical, emotional, and social. Nutrition, infectious diseases, substance abuse and addiction, mental health, sexual health, aging and stress management are among the issues that will be discussed. Students will learn to intelligently relate health knowledge to the social issues of the day.
Attributes: Biological Science(Discovery)
Grade Mode: Letter Grading

BSCI 432 - Medical Terminology
Credits: 2
This course is an introduction to medical terminology. The origin, roots, prefixes and suffixes of common scientific and medical terms are examined. Course is totally online and includes assigned online interactive material. Appropriate for biology majors, prePA, premed, and other interested majors.
Grade Mode: Letter Grading

BSCI 441 - Exploring NH Forests: Drawing to Discover the Tree Community
Credits: 4
Discover the hidden stories of New Hampshire's forests as you learn to see like an artist and think like an ecologist. This course combines foundational drawing techniques (no prior drawing skills required!) with hands-on exploration of the forest community and current forest ecology research topics. Through guided outdoor sessions students will sharpen their ability to observe and document the natural world. In-class activities, discussion and readings will provide opportunities to discover the ecological principles and breaking research that describe how trees connect to each other and their community. Inspired by their forest experiences, students will engage in a research project of interest to create an illustrated report.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

BSCI 450 - The Small Microbial World
Credits: 0 or 4
An introduction to the invisible world of microbes and microorganisms and their impact on human life and ecosystems. Laboratory will be an opportunity for science and non-science students to learn the scientific method while they participate in citizen or crowdsourced science and contribute to scientific knowledge. Vaccines, antibiotics, and other topics will be presented.
Attributes: Biological Science(Discovery); Discovery Lab Course
Grade Mode: Letter Grading
Special Fee: Yes

BSCI 505 - Biosciences Sophomore-Junior Seminar
Credits: 2
The Biosciences Sophomore/Junior Seminar is tailored for Biological Sciences and Biotechnology students in their sophomore or junior years. This seminar serves as a platform to help students plan for and work towards the successful completion of their Capstone project during their senior year. In addition, the seminar is intended to proactively prepare students for careers in the biosciences through refinement of professional and career skills useful for applications for jobs or further education.
Grade Mode: Credit/Fail Grading

BSCI 599 - Special Topics in Biology
Credits: 1-4
This course explores and investigates topics in biology that would not normally be covered in other courses in the curriculum.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

BSCI 620 - Global Science Exploration
Credits: 4
This course includes a spring break trip abroad investigating living organisms in their natural habitat. Students will participate in pre-trip seminars on the country, local flora, fauna and habitats they will visit. Students will design a project to integrate their personal interests and objections with in-country investigation. Post-trip seminar will focus on preparation of project and its presentation. May be repeated if the spring break trip is to a different country.
Attributes: Writing Intensive Course
Prerequisite(s): (BIOL 413 with a minimum grade of C- and BIOL 414 with a minimum grade of C-) or (BIOL 411 with a minimum grade of C- and BIOL 412 with a minimum grade of C-).
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading
Special Fee: Yes

BSCI 650 - Antibiotic Discovery Lab
Credits: 3
Advanced students with microbiology experience will participate in a research project focused on the discovery of novel antibiotics from soil bacteria. Each student will work with faculty to generate hypotheses and carry out one or more short antibiotic discovery and/or antibacterial chemical experiments. Satisfies the Advanced Microbiology requirement for Biotechnology majors. No credit earned if previously taken BSCI 797/Antibiotic Discov Research and BSCI 798/Antibiotic Discovery.
Co-requisite: BSCI 651
Attributes: Writing Intensive Course
Prerequisite(s): (BMS 503 with a minimum grade of C- and BMS 504 with a minimum grade of C-) or BSCI 450 with a minimum grade of C-.
Grade Mode: Letter Grading
Special Fee: Yes

BSCI 651 - Antibiotic Discovery
Credits: 3
Advanced students with microbiology experience will participate in a research project focused on the discovery of novel antibiotics from soil bacteria. Each student will work with faculty to generate hypotheses and carry out one or more short antibiotic discovery and/or antibacterial chemical experiments. Satisfies the Advanced Microbiology requirement for Biotechnology majors. No credit earned if previously taken BSCI 797/Antibiotic Discov Research and BSCI 798/Antibiotic Discovery.
Co-requisite: BSCI 650
Prerequisite(s): (BMS 503 with a minimum grade of C- and BMS 504 with a minimum grade of C-) or BSCI 450 with a minimum grade of C-.
Grade Mode: Letter Grading

BSCI 670 - Clinical Pathophysiology
Credits: 4
This course covers the principles and mechanisms of disease at the cellular, tissue, organ, and system levels, including responses to cell injury, death and adaptation, and inflammation. Acute and chronic disease processes as well as trauma are used to both understand the impact of these processes on body function as well as a means to gain a better understanding of integrative body systems. No credit if credit earned for BMS 794 or UMST 599 Clinical Pathophysiology.
Prerequisite(s): (BIOL 413 with a minimum grade of C- and BIOL 414 with a minimum grade of C-) or (BMS 507 with a minimum grade of C- and BMS 508 with a minimum grade of C-) or (BIOL 411 with a minimum grade of C- and BIOL 412 with a minimum grade of C-).
Equivalent(s): BMS 704
Grade Mode: Letter Grading

BSCI 680 - Pharmacology
Credits: 4
This course is designed to cover the concepts of basic pharmacology and drug therapy. It includes examination of the body systems and the related drugs therapy within each system. It explores the basic drug groups, key similarities and differences among drugs in each group. Emphasis is placed on the mechanism of action for each group and how these medications act in relation to normative and pathophysiology. The therapeutic use and adverse effects of drugs as well as understanding recreational drug use will be included. No credit if credit received for UMST 599 Pharmacology.
Prerequisite(s): (BIOL 413 with a minimum grade of C- and BIOL 414 with a minimum grade of C-) or (BMS 507 with a minimum grade of C- and BMS 508 with a minimum grade of C-) or (BIOL 411 with a minimum grade of C- and BIOL 412 with a minimum grade of C-).
Mutual Exclusion: No credit for students who have taken BMCB 760.
Grade Mode: Letter Grading

BSCI 695 - Exploring Biology Teaching
Credits: 1-4
Students assist in teaching labs in undergraduate courses supervised by the lab coordinator/instructor. Responsibilities include facilitating lab endeavors, giving a presentation, and writing a report.
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): BIOL 695
Grade Mode: Letter Grading

BSCI 701 - Senior Seminar I
Credits: 1
To be taken during the last two semesters of the senior year as students complete their Capstone project. Course emphasizes written and oral communication, discussion of current topics in biology, and career guidance. Fall and spring semester.
Grade Mode: Credit/Fail Grading

BSCI 737 - Microbial Genomics and Biotechnology Lab
Credits: 3
Provides a combined wet-lab and computational experience in microbial genomics and biotechnology, including microbial cultivation and biochemical testing, genome analysis, and bioprocess-relevant workflows. Students will conduct experiments relevant to genomic characterization while learning approaches for detecting, preventing, and mitigating microbial contamination in laboratory and biomanufacturing settings. Bioinformatics modules introduce hands-on genome assembly, annotation, and comparative analysis using current tools. Emphasis is placed on experimental design, data interpretation, and communication of findings.
Co-requisite: BSCI 738
Prerequisite(s): GEN 604 with a minimum grade of C- and BMS 503 with a minimum grade of C- and BMS 504 with a minimum grade of C-.
Grade Mode: Letter Grading
Special Fee: Yes

BSCI 738 - Microbial Genomics and Biotechnology
Credits: 3
This course focuses on microbial genome biology and the biotechnological applications of microbes and microbial systems. Topics include genome structure, comparative and metagenomic approaches, microbial engineering, and applications in health, industry, synthetic biology, and biomanufacturing . Microbial contamination and control in bioprocessing and research environments are also included.
Co-requisite: BSCI 737
Prerequisite(s): GEN 604 with a minimum grade of C- and BMS 503 with a minimum grade of C- and BMS 504 with a minimum grade of C-.
Grade Mode: Letter Grading

BSCI 740 - Aquatic Microbiology
Credits: 4
Lectures and labs focus on Lake Massabesic and its use as the source of supply as the drinking water for approximately 160,000 New Hampshire residents. The course covers a basic history of the Lake, the importance of watershed protection, EPA regulations, and standards and the various techniques and methods available to analyze water for basic quality. No credit for students who have earned credit for UMST 599 Aquatic Microbiology.
Attributes: Writing Intensive Course
Prerequisite(s): BMS 503 with a minimum grade of C- and BMS 504 with a minimum grade of C-.
Grade Mode: Letter Grading
Special Fee: Yes

BSCI 750 - Cancer Biology: From Benchtop Research to Therapeutic Interventions
Credits: 4
The development and progression of cancer can be defined by several molecular and cellular biological characteristics. In this course, we will utilize primary literature to begin to understand (1) how specific cellular processes are altered during cancer initiation and progression; (2) how different cancers and the genetic landscape underlying them are being studies using models in the laboratory; and (3) how innovative therapeutics are being designed to target tumors based upon their individual molecular signatures.
Prerequisite(s): GEN 604 with a minimum grade of C-.
Grade Mode: Letter Grading

BSCI 792 - Research
Credits: 1-4
Advanced independent research under the direction of a faculty mentor. Content area to be determined in consultation with faculty member. Prereq: permission. Up to 4 credits may be applied to self-designed concentration. Up to 4 credits may be applied to the Capstone requirement. Fall and spring semester.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

BSCI 793 - Internship
Credits: 1-4
Field-based learning opportunities in the biological sciences through placement in the appropriate outside agency, under the direction of a faculty mentor and representative of outside agency. Content area to be determined in consultation with faculty mentor. Up to 4 credits may be applied to self-designed concentration. Up to 4 credits may be applied to the Capstone requirement. Fall and spring semester.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

BSCI 795 - Independent Study
Credits: 1-4
Advanced individual study under the direction of a faculty mentor. Content area to be determined in consultation with faculty mentor. Up to 4 credits may be applied to self-designed concentration. Up to 4 credits may be applied to the Capstone requirement. Fall and spring semester.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

BSCI 797 - Special Topics in Biology
Credits: 1-4
This course explores and investigates topics in biology and biotechnology that would not normally be covered in other courses in the curriculum.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

BSCI 798 - Special Laboratory Topics in Biology
Credits: 0-4
This laboratory course explores and investigates advanced topics in biology that would not normally be covered in other courses in the curriculum.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

Biology (BIOL)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

BIOL 400 - Professional Perspectives on Biology
Credits: 1
Where can a degree in biology take me? This course views the scope of biology and explores professional opportunities for biological science majors. Guest speakers from on- and off-campus present seminars and lead discussions on contemporary issues in biology. This course will help you learn the skills required to succeed in biology and develop strategies for college success. Today, the field is multidimensional, offering many career opportunities for the future. Required for all first semester biology majors.
Grade Mode: Credit/Fail Grading

BIOL 402 - Biology in our Daily Lives
Credits: 4
Students will learn about the nature and practice of science as it relates to biology, and the ways in which our activities have a biological impact on the world around us. Throughout the course, the students will examine the biological messages with which we are constantly bombarded, and by linking background scientific principles to those messages, practice distinguishing science from pseudoscience.
Attributes: Biological Science(Discovery)
Grade Mode: Letter Grading

BIOL 408 - Plants and Civilization
Credits: 4
Global experience of human interactions with plants, and the ways in which plants have contributed to the development and the flourishing of human societies. Includes role of plants in providing sustenance, clothing and shelter, quest for spices, the historical consequences of plant explorations and exploitations, the power to heal or kill, plants in mythology and spiritual endeavors, plants that alter consciousness, plant diseases and human history, plants as energy for society, and the Green Revolution in global change and feeding the world in the future.
Attributes: Biological Science(Discovery); Discovery Lab Course
Equivalent(s): PBIO 400
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 409 - Green Life: Introducing the Botanical Sciences
Credits: 0 or 4
All human and other animal life on earth depends upon green life: i.s., the plant world. In its diverse forms, green life is the ultimate source of our food, and of the atmospheric breath of life: oxygen. This course explores the structure, function, growth, reproduction, and remarkable evolutionary diversity of plants in their natural and human-influenced environments. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course
Equivalent(s): BOT 412, PBIO 412
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 411 - Introductory Biology: Molecular and Cellular
Credits: 0 or 4
Introduction to structure and function of cells; tissues and organs; physiological processes; genes and heredity. Required for majors in the biological sciences. Lab. Students not permitted to enroll in BIOL 411 and BIOL 412 in the same semester.
Attributes: Biological Science(Discovery); Discovery Lab Course; Inquiry (Discovery)
Equivalent(s): BIOL 411H
Mutual Exclusion: No credit for students who have taken BIOL 413.
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 411H - Honors/Introductory Biology: Molecular and Cellular
Credits: 0 or 4
Introduction to structure and function of cells, tissues and organs, physiological processes and genes and heredity. Required for majors in the biological sciences. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course; Honors course; Inquiry (Discovery)
Equivalent(s): BIOL 411
Mutual Exclusion: No credit for students who have taken BIOL 413.
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 412 - Introductory Biology: Evolution, Biodiversity and Ecology
Credits: 0 or 4
Evolution is the paradigm through which we understand Biology. This course will introduce students to evolutionary concepts that underlie the tremendous biodiversity present on Earth, and explore the ecological interactions that occur among individuals and species. Indoor and outdoor lab activities. Required for majors in the biological sciences. Students are not permitted to enroll in BIOL 411 and BIOL 412 in the same semester. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course; Inquiry (Discovery)
Equivalent(s): BIOL 412H
Mutual Exclusion: No credit for students who have taken BIOL 414.
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 412H - Honors/Introductory Biology: Evolution, Biodiversity, and Ecology
Credits: 0 or 4
Evolution is the paradigm through which we understand Biology. This course will introduce students to evolutionary concepts that underlie the tremendous biodiversity present on Earth, and explore the ecological interactions that occur among individuals and species. Indoor and outdoor lab activities. Required for majors in the biological sciences. Students are not permitted to enroll in BIOL 411 and BIOL 412 in the same semester. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course; Honors course; Inquiry (Discovery)
Equivalent(s): BIOL 412
Mutual Exclusion: No credit for students who have taken BIOL 414.
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 413 - Principles of Biology I
Credits: 0 or 4
Lecture and Laboratory introduction to biological principles; cell structure, function, replication, energetics and transport mechanisms; physiological processes; Mendelian, molecular genetics and gene technology. Required for students majoring in the life sciences. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course; Inquiry (Discovery)
Mutual Exclusion: No credit for students who have taken BIOL 411, BIOL 411H.
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 414 - Principles of Biology II
Credits: 0 or 4
Lecture and laboratory survey of the five kingdoms of life; physiology of cells, tissues, organs, and organ systems; evolution; human impact on the biosphere. Required for students majoring in the life sciences. Cannot be taken for credit after BIOL 412 or equivalent. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course
Mutual Exclusion: No credit for students who have taken BIOL 412, BIOL 412H.
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 420 - Introduction to Forensic Sciences
Credits: 0 or 4
Explore the forensic sciences! How do you collect, preserve, and analyze evidence related to a crime scene investigation? Hear from the experts and apply scientific principles and techniques in laboratory exercises that follow a crime scene scenario. The goal of this class will be to provide students with an understanding of what criminalistics entails and to prepare them for additional, more in-depth classes in criminalistics or forensic science.
Attributes: Biological Science(Discovery); Discovery Lab Course
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 428 - Quantitative Biosciences
Credits: 4
Quantitative Biosciences introduces first and second-year students in the life sciences to the quantitative approaches used in molecular biology, behavior/physiology, and ecology. Through lectures (e.g., focused on quantitative concepts and biological material) and recitations (e.g., focused on applying quantitative concepts to biological case studies), students will learn to apply mathematical models, perform data analysis, and use computational tools to address biological questions. This course emphasizes the integration of quantitative methods across multiple biological scales—from molecules to ecosystems. Students are expected to have had high school biology. Previous undergraduate coursework in biology in helpful, but not required.
Attributes: Quantitative Reasoning(Disc)
Grade Mode: Letter Grading

BIOL 430 - Biology of the City
Credits: 4
This course explores biological systems, functions, and interaction of organisms in an urban environment. Using the campus as our laboratory, the course will progress from exploring the effects of urbanization on biodiversity, biological responses to urbanization, urban forestry, urban agriculture, and conclude with topics in sustainable urban development and conservation. Students in the course will develop an understanding of ecological concepts, problems, and solutions to improving ecological systems of urban areas.
Attributes: Biological Science(Discovery); Discovery Lab Course
Grade Mode: Letter Grading

BIOL 444B - Current Controversial Issues in Biology
Credits: 4
An inquiry into current controversial issues in biology and their scientific and technical bases, but with an emphasis on exploring the various perspectives or beliefs related to each topic and their social and environmental implications.
Attributes: Biological Science(Discovery); Inquiry (Discovery)
Grade Mode: Letter Grading

BIOL 510 - Mushrooms, Molds, and Mildews: Introduction to the Fungal Kingdom
Credits: 4
Fungi are a fascinating group of organisms that occupy nearly every habitat on the planet. We encounter fungi in everyday life from the dangerous to the delicious. This course is a fun, approachable introduction to the world of fungi. Students will learn about the role fungi play in human society, review basic concepts of fungal biology and discuss important issues of our time: how we use fungi to make medicines, how fungi feed us, how plant diseases and food spoilage affect food supply, and how fungi contribute to ecosystem functioning.
Grade Mode: Letter Grading

BIOL 520 - Our Changing Planet
Credits: 4
Ecosystem interrelations and factors critical to maintain sustainability will be addressed in this course. Environmental issues such as water usage, pollution, and treatment; air and soil quality; fossil fuels and alternative energy sources will be presented. Not for credit if credit earned for ENE 520.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): CEE 520, ENE 520
Grade Mode: Letter Grading

BIOL 528 - Applied Biostatistics I
Credits: 4
Knowledge of biostatistics is essential to understanding our observations of life on Earth and properly design and conduct scientific research. Students develop skills in organizing data and performing, presenting, and interpreting statistical analyses. Theoretical concepts are applied using statistical software(s) and prepared biological data. Topics include descriptive statistics, continuous and discrete probability distributions, inferential statistics, confidence intervals, hypothesis testing for a difference of means and proportions, linear regression, non-parametric hypothesis testing, and graphing.
Attributes: Quantitative Reasoning(Disc)
Mutual Exclusion: No credit for students who have taken ADM 430, ADMN 420, ADMN 510, EREC 525, HHS 540, HMP 540, MATH 439, MATH 539, MATH 644, PSYC 402, PSYC 402H, SOC 402, SOC 402H, SOC 502, SOC 502H.
Grade Mode: Letter Grading

BIOL 541W - Ecology
Credits: 0 or 4
Physical and biological factors affecting distribution, abundance, and adaptations of organisms. Population, community, and ecosystem structure and function. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D- or NR 439 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Equivalent(s): BIOL 541
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 566 - Systematic Botany
Credits: 0 or 4
Scientific basis of plant taxonomy and the identification and classification of major plant families, native trees, shrubs, and wildflowers. Field trips, plant collection. Lab.
Prerequisite(s): (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D- or BIOL 409 with a minimum grade of D-).
Equivalent(s): PBIO 566
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 600 - Field Experience
Credits: 1-4
A supervised experience providing the opportunity to apply academic experience in settings associated with future professional employment and/or related graduate opportunities. Must be approved by a faculty adviser selected by the student.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

BIOL 633 - Data Analysis for Life Science
Credits: 4
Expand your statistical knowledge and resume by learning R. Use project-based learning to explore topics such as inequalities of life expectancy, heart disease and risk behaviors, biomagnification of ecotoxins, and impacts of ticks on wildlife populations while learning statistical skills and R. In this course students will learn to become proficient in R (data manipulation, graphing, hypothesis testing, importing and cleaning data) and learn to effectively communicate statistical results.
Prerequisite(s): BIOL 528 with a minimum grade of D- or ADMN 510 with a minimum grade of D- or EREC 525 with a minimum grade of D- or HHS 540 with a minimum grade of D- or MATH 439 with a minimum grade of D- or MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D- or PSYC 402 with a minimum grade of D- or PSYC 402H with a minimum grade of D- or SOC 402 with a minimum grade of D- or SOC 402H with a minimum grade of D- or SOC 502 with a minimum grade of D- or SOC 502H with a minimum grade of D-.
Grade Mode: Letter Grading

BIOL 695 - Biology Teaching Practices
Credits: 1-4
Students assist instructor in biology course labs. Responsibilities may include assisting instructors with field trips, lab set-up and clean-up, helping students during lab and field exercises, presenting material, and creating a project that enhances the curriculum. You may be expected to present material or create a project that enhances the curriculum. This course is by invitation only.
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): BSCI 695
Grade Mode: Letter Grading

BIOL 700 - Current and Controversial Issues in Biology
Credits: 4
This course explores current issues in the biological sciences that are controversial and have a significant impact on individuals and society. Issues related to human population growth, evolution, cloning, synthetic biology, genetically modified organisms, free will, etc. Biology capstone. Only open to Animal Science, Zoology, Neuroscience and Behavior, Biology, Marine & Freshwater Biology, and Sust Agriculture& Food Systems majors.
Grade Mode: Letter Grading

BIOL 701 - Plant Physiology
Credits: 4
This course covers general principles of plant physiology relating plant structure to function and introduce basic physiological processes underlying plant growth and development and plant responses to the environment. Course topics include plant cell structure, plant water relations, plant mineral nutrition, metabolism, photosynthesis, plant respiration, signal transduction, plant growth regulators, photomorphogenesis, plant development, reproduction, senescence, and stress physiology. Course format consists of lectures and laboratory session. The laboratory session is designed to accompany lectures in plant physiology. The laboratories' core objective is to help students visualize main basic concepts and common techniques in plant physiology by running basic experiments, analyze data, and present results.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 704 - Plant-Microbe Interactions
Credits: 3
Microbes and plants have developed intriguing strategies to encourage, resist or profit from their coexistence. The primary objective of the course is to provide students with a comprehensive overview of the various ways in which microbes interacts with plants, the outcomes of that interplay, and applications of these interactions and explore how these interactions impact ecosystem function.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-) and (GEN 604 with a minimum grade of D- or (BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-)).
Grade Mode: Letter Grading

BIOL 706 - Data Science with R for the Life Sciences
Credits: 4
Introduces students to the basic data analysis and programming tools commonly used throughout the life sciences. Students will become proficient in R programming, data wrangling and cleaning, the principles of open and reproducible science, SQL database management, version control via Git/Github, building maps, and Bash command lines. Data sets and case studies from across the life sciences will be used throughout the course. The class culminates with an small group project.
Grade Mode: Letter Grading

BIOL 711 - Experimental Design & Analysis
Credits: 4
Design and analysis of biological and ecological research experiments. "Real world" studies used to discuss the identification of hypotheses, appropriate experimental design, and the application of statistical analyses including ANOVA, ANCOVA, correlation and regression, cluster analysis, classification and ordination techniques. Theoretical statistical concepts tailored to consider students' own thesis and dissertation research, allowing statistical problems to be addressed at various stages of the research process. Common computer packages used for analyses include Excel, JMP, Systat, and R.
Grade Mode: Letter Grading

BIOL 714W - Model Organisms in Biological and Medical Research
Credits: 2
Animals, plants, and microbes serve as powerful tools for both basic and biomedical research. This course integrates historical, philosophical, sociological, and biological perspectives to examine how models are chosen and used. and how to evaluate their strengths and weaknesses. Students will study particular model species in depth, and address general epistemological questions about the choice and use of model organisms. This course is designed for graduate students and advanced undergraduates interested in research. 58 hours of Undergrad Coursework, including advanced study in at least one specified area required.
Attributes: Writing Intensive Course
Equivalent(s): BIOL 714
Grade Mode: Letter Grading

BIOL 720 - Plant-Animal Interactions
Credits: 4
Animals and plants engage in a range of interactions, from plant-pollinator and plant-ant mutualisms to plant-herbivore and carnivorous plant antagonisms. This course will explore the consequences of a variety of interactions on the evolution of traits in both animals and plants, considering implications for both conservation and agriculture. Weekly recitation.
Attributes: Writing Intensive Course
Prerequisite(s): (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading

BIOL 752 - New England Mushrooms: a Field and Lab Exploration
Credits: 4
This is a hands-on field, lab and lecture course in the identification, classification, life histories, and ecology of mushrooms and other macrofungi. Lectures focus on macrofungal ecology and systematics. Laboratory instruction emphasizes morphological, microscopic, and molecular identification techniques, plus the use of smart-phone field note recording and on-line resources. Several field trips are required in addition to the weekly laboratory. Previous experience with fungi is not required. Grades are based on a collection, a project, and presentations.
Prerequisite(s): ((BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) or (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-)) or BIOL 409 with a minimum grade of D-.
Equivalent(s): BOT 752, PBIO 752
Grade Mode: Letter Grading
Special Fee: Yes

BIOL 775 - Plant Rx
Credits: 3
This course will explore the biomedical and neuroscientific applications of plants. Through lectures, discussions and readings, the centuries old reliance of humans on plants to treat basic ailments, as well as how plants and their metabolites have catalyzed countless advances and inspired major discoveries in neuroscience, pharmacology, and medicine will be examined. The focus of the course will be split between understanding the biology of how and why plants produce secondary metabolites with medicinal properties and understanding how these signaling molecules have been used by humans to treat various ailments and expand the mind.
Prerequisite(s): BMCB 658 with a minimum grade of D- or BMCB 658A with a minimum grade of D-.
Grade Mode: Letter Grading

BIOL 780 - Capstone Companion Course
Credits: 1
This course is the required companion course to a student's individual capstone experience. It must be taken during the same semester as the individual experience, or in the fall immediately following a summer experience. This course will help connect a student's individual capstone experience to their broader academic program, and will be a forum for sharing individual experiences with peers. Thesis students should enroll in BIOL 780 during the second semester of the thesis. Should also be taken with a pre-approved individual capstone experience.
Grade Mode: Credit/Fail Grading

BIOL 795 - Independent Investigations in Biology
Credits: 1-4
Independent study in a topic related ot Biology, arranged by the student with a faculty sponsor. Enrollment by permission only.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 5 times.
Equivalent(s): BIOL 795W
Grade Mode: Letter Grading

BIOL 795W - Independent Investigations
Credits: 1-4
Topics may include teaching or research practicum in a biological science, supervised by a faculty member.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): BIOL 795
Grade Mode: Letter Grading

BIOL 799H - Honors Senior Thesis
Credits: 2-8
Independent research requiring a written proposal, a thesis, and a final public presentation (e.g. the Undergraduate Research Conference). Intended for biology majors completing biology Honors-in-major requirements. Contact biology program coordinator prior to senior year to arrange supervision and obtain permission. Two consecutive semesters. (4 credit minimum total; 8 credits maximum).
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): BIOL 799
Grade Mode: Letter Grading

Biomedical Science (BMS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

BMS 407 - Germs 101
Credits: 4
Societal and technological impact of the invisible microbial world on our lives and on the planet. Weekly extra-class activities enable students to use the scientific method of inquiry to explore topics like bacteria that use sunlight to live or use of bacteria in genetic engineering. Presents germs from different perspectives: as living organisms, as human enemies or friends, and as represented in newspapers or on TV. Especially useful for people with microphobia. No credit for BMS or Biology majors.
Attributes: Biological Science(Discovery)
Equivalent(s): BIOL 407, BMS 408, MICR 407
Grade Mode: Letter Grading

BMS 501 - Microbes in Human Disease
Credits: 0 or 4
Identification, pathogenesis, epidemiology, treatment, and prevention of medically important microorganisms. The biology of clinically relevant bacteria, viruses, fungi, and parasites is presented in relation to disease progress and host defense mechanisms. Clinical correlations that indicate microbes are causative agents of disease are emphasized. The laboratory introduces techniques for identification of pathogenic microorganisms to reinforce and expand the theoretical content. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course
Equivalent(s): BMS 501H
Grade Mode: Letter Grading
Special Fee: Yes

BMS 503 - General Microbiology
Credits: 3
Principles of microbiology; morphology, physiology, genetics, culture, and classification of bacteria and other microorganisms; relationships of microbes to agriculture, environment, industry, sanitation, and infectious diseases.
Co-requisite: BMS 504
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BMS 507 with a minimum grade of D- or BIOL 413 with a minimum grade of D- and (((CHEM 403 with a minimum grade of D- and (CHEM 404 with a minimum grade of D-) or (CHEM 404H with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Equivalent(s): MICR 503
Grade Mode: Letter Grading

BMS 504 - General Microbiology Laboratory
Credits: 2
Practical laboratory training in general microbiology. Topics include safe handling, visualization, and physiological identification of microorganisms with special attention given to aseptic technique.
Co-requisite: BMS 503
Grade Mode: Letter Grading
Special Fee: Yes

BMS 507 - Human Anatomy and Physiology I
Credits: 0 or 4
Cellular and systematic aspects of the human body. Laboratory exercises utilize preserved specimens, dissectible models, living tissue and computer-aided instruction. Systems covered include: the cell, chemistry, tissues, integument, osseous tissue and the skeleton, muscular tissue and muscles, nerves, the brain, spinal cord, autonomic nervous system, and special senses. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course
Mutual Exclusion: No credit for students who have taken ANSC 511.
Grade Mode: Letter Grading
Special Fee: Yes

BMS 508 - Human Anatomy and Physiology II
Credits: 0 or 4
Cellular and systematic aspects of the human body. Laboratory exercises utilize preserved specimens, dissectible models, living tissue and computer-aided instruction. Systems covered include: endocrine, blood, cardiovascular, respiratory, immune, digestive and metabolism, urinary, acid-base and electrolyte balance, reproductive.
Attributes: Biological Science(Discovery); Discovery Lab Course
Prerequisite(s): BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BMS 507 with a minimum grade of D- or BIOL 413 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken ANSC 512.
Grade Mode: Letter Grading
Special Fee: Yes

BMS 560 - Body Fluids
Credits: 3
The study of diseases and disorders through the analysis of extra-vascular body fluids. Emphasizes renal anatomy and physiology, and diseases and metabolic disorders affecting renal function.
Equivalent(s): BMS 660, MEDT 665, MLS 660, MLS 665
Grade Mode: Letter Grading

BMS 561 - Body Fluids Laboratory
Credits: 1
Practical experience in the performance and clinical correlation of urinalysis and selected body fluid procedures.
Co-requisite: BMS 560
Equivalent(s): BMS 661, MEDT 665, MLS 661, MLS 665
Grade Mode: Letter Grading
Special Fee: Yes

BMS 600 - Field Experience
Credits: 1-4
Supervised experience providing the opportunity to apply academic experience in settings associated with future professional employment and/or related graduate opportunities. Must be approved by a faculty advisor selected by the student. Only 4 credits can be used toward the major.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): BMS 600W, MICR 600, MICR 600W
Grade Mode: Credit/Fail Grading

BMS 602 - Pathogenic Microbiology
Credits: 3
An introduction to microbial disease, with a focus on bacterial and viral diseases in humans and animals. This course examines the clinical presentation, laboratory diagnosis, and treatment of specific microbial pathogens. Molecular aspects of both microbial infection and host immune response are discussed. Case studies based on real clinical and research microbiology problems are presented.
Prerequisite(s): BMS 501 with a minimum grade of D- or (BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-).
Equivalent(s): MICR 602, MICR 700
Grade Mode: Letter Grading

BMS 603 - Pathogenic Microbiology Laboratory
Credits: 2
An introduction to morphologic, cultural, biochemical and pathogenic characteristics of microorganisms causing human and animal diseases. Laboratory exercises focus on both classical and modern laboratory diagnostic testing.
Co-requisite: BMS 602
Prerequisite(s): BMS 501 with a minimum grade of D- or (BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

BMS 610 - Biomedical Lab Management
Credits: 4
Overview of biomedical laboratory management, including lab operation, compliance, financial management, personnel management, information systems, and leadership.
Attributes: Writing Intensive Course
Equivalent(s): MEDT 610, MLS 610
Grade Mode: Letter Grading

BMS 616 - Microbial Ecology
Credits: 3
This course provides an introduction to microbial ecology across environments, covering: community interactions and assembly, microbial dispersal, microbiomes on hosts, microbial effects on environments, and changes through time.
Prerequisite(s): BMS 503 with a minimum grade of D-.
Grade Mode: Letter Grading

BMS 623 - Histology: Microscopic Cellular Structure and Function
Credits: 4
Cellular structure, function, and physiology, as well as the interactions between cells in different organ systems, are examined at the microscopic level. Digital microscopic images are utilized to examine the cellular structure of all organ systems and the interactions between cells in these organs. Hybrid course with online lab.
Prerequisite(s): (ANSC 511 with a minimum grade of D- and ANSC 512 with a minimum grade of D-) or ((BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BMS 507 with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and BMS 508 with a minimum grade of D-).
Grade Mode: Letter Grading

BMS 635 - Preceptorial in Prehospital Care
Credits: 2
Practice and evaluation of prehospital care. Understand the roles of different provider levels in a healthcare setting. Students participate in ambulance activities, then discuss assessment and treatment of patients in the prehospital setting. Licensure by the New Hampshire Bureau of EMS required before course start date.
Prerequisite(s): KIN 684 with a minimum grade of D- and KIN 685 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

BMS 640 - Phlebotomy Theory
Credits: 2
Theory and demonstration of procedures involved in blood collection with an emphasis on safety and professionalism. Hands-on practice of selected techniques.
Grade Mode: Letter Grading
Special Fee: Yes

BMS 641 - Phlebotomy Clinical Internship
Credits: 1-2
Students obtain experience and proficiency in routine blood collection techniques at a health care facility (80 to 120 hours).
Prerequisite(s): BMS 640 with a minimum grade of D-.
Equivalent(s): MLS 641, MLS 650B
Grade Mode: Credit/Fail Grading
Special Fee: Yes

BMS 642 - Clinical Immunology and Serology
Credits: 2
Innate and specific immunity in the context of chemical and cellular responses to antigenic challenge. Also introduces the immunologic basis of autoimmunity, immune proliferation and deficiency, and hypersensitivity. Current clinical analytical methodologies and diagnostic criteria used to identify, differentiate and/or monitor these responses and conditions included.
Prerequisite(s): ((BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-)) or (BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-) or (ANSC 511 with a minimum grade of D- and ANSC 512 with a minimum grade of D-).
Equivalent(s): MEDT 651, MLS 642, MLS 651
Grade Mode: Letter Grading

BMS 643 - Clinical Serology Laboratory
Credits: 2
Performance, interpretation and application of serological techniques for the diagnosis of immune system disorders.
Co-requisite: BMS 642
Equivalent(s): MEDT 651, MLS 643, MLS 651
Grade Mode: Letter Grading
Special Fee: Yes

BMS 644 - Clinical Hematology
Credits: 3
Human blood cell physiology in both health and disease. Includes benign and malignant conditions of red blood cells and white blood cells.
Equivalent(s): MLS 644, MLS 652
Grade Mode: Letter Grading

BMS 645 - Clinical Hematology Laboratory
Credits: 2
Analysis of whole blood for cellular components with special emphasis on differentiating benign from malignant processes, as well as cellular identification by morphologic characteristics and cytochemical staining.
Co-requisite: BMS 644
Equivalent(s): MLS 645, MLS 652L
Grade Mode: Letter Grading
Special Fee: Yes

BMS 646 - Clinical Hemostasis
Credits: 1
Introduction to hemostasis through evaluation of platelets, blood vessels, coagulation factors and fibrinolysis, including dysfunction and disease states.
Prerequisite(s): BMS 644 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

BMS 650 - Molecular Diagnostics
Credits: 4
Fundamental principles of molecular technology and techniques used in clinical laboratories such as nucleic acid extraction, DNA amplification, sequencing and hybridization, gel electrophoresis, and chromosome analysis. Prediction and detection of human disease (infectious disease, cancer, and other inherited disease), identity testing, molecular epidemiology, pharmacogenetics, and ethical issues. Previous knowledge of genetics and biochemistry lab techniques is highly recommended.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): BMS 755, BSCI 765, MLS 755
Grade Mode: Letter Grading

BMS 655 - Human and Animal Parasites
Credits: 3
Introduction to the parasitic process in humans and different animals indigenous to domestic and foreign areas of the world. Topics include epidemiology, infection, control, genetics, and immunology, as well as global economic consequences.
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-.
Grade Mode: Letter Grading

BMS 656 - Immunohematology
Credits: 3
The immunology of blood, including blood group systems and the critical role they play in safe transfusion medicine. Additional topics include blood collection, component use, transfusion reactions, and transfusion-transmitted infections.
Equivalent(s): MEDT 653, MLS 653, MLS 656
Grade Mode: Letter Grading

BMS 657 - Blood Banking Laboratory
Credits: 1
Hands-on experience in clinical blood banking practices including blood typing, antibody screening and identification, cross matching, and confirmatory testing.
Co-requisite: BMS 656
Equivalent(s): MEDT 653, MLS 653, MLS 657
Grade Mode: Letter Grading
Special Fee: Yes

BMS 658 - Medical Biochemistry
Credits: 3
Use of body fluids to assess specific disease states including the pathophysiology of the disease, pre-analytical issues, analytical methodologies, and instrumentation. Topics include the biochemistry of analytes (amino acids, proteins, enzymes, tumor markers, non-protein nitrogen metabolites, carbohydrates, lipids, electrolytes, blood gases, etc.), clinical endocrinology, toxicology and therapeutic drug monitoring.
Prerequisite(s): ((BMCB 658 with a minimum grade of D- and BMCB 659 with a minimum grade of D-) or BMCB 751 with a minimum grade of D-) and (BIOL 528 with a minimum grade of D- or PSYC 402 with a minimum grade of D- or SOC 402 with a minimum grade of D- or MATH 439 with a minimum grade of D-).
Equivalent(s): MEDT 654, MLS 654, MLS 658
Grade Mode: Letter Grading

BMS 659 - Clinical Chemistry Laboratory
Credits: 2
Measurement of blood analytes such as proteins, glucose, electrolytes, and cholesterol, etc. Screening for drugs in urine and evaluation of clinical significance in human specimens. Principles of spectrometry, immunoassay, point-of-care testing, chromatography, mass spectrometry, electrophoresis, automation, and ion selective electrodes, with emphasis on instrumentation, quality control, and pre-analytical and analytical issues.
Co-requisite: BMS 658
Equivalent(s): MLS 654L, MLS 659
Grade Mode: Letter Grading
Special Fee: Yes

BMS 702 - Endocrinology
Credits: 4
Structure and function of vertebrate endocrine systems through the lens of physiology, biochemistry, and cell and molecular biology, with special reference to mammals. Current investigations of the body's major endocrine glands, such as the brain, thyroid, pancreas, adrenals and gonads, as regulators and integrators of biological systems. Principles of Cell Biology recommended prior to taking this course.
Grade Mode: Letter Grading

BMS 703 - Infectious Disease and Health
Credits: 4
Principles underlying the nature of infectious disease agents, including representative parasites, fungi, bacteria, viruses, and prions. Established pathogens and emerging human and animal disease agents highlighting zoonotic diseases. Epidemiology, pathogenesis, host immune response, disease transmission, treatment, and control. Weekly review and discussion of current world disease events.
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-.
Equivalent(s): MICR 702
Grade Mode: Letter Grading

BMS 704 - Pathologic Basis of Disease
Credits: 4
Principles and mechanisms of disease at the cellular and tissue levels, including responses to cell injury, death and adaptation, inflammation, circulatory disturbances, disorders of the immune system, and neoplasia. ANSC 511 and ANSC 512, or BMS 507 and BMS 508 recommended.
Equivalent(s): ANSC 704
Grade Mode: Letter Grading

BMS 705 - Immunology
Credits: 3
An introduction to the fundamental mechanisms of immune function. Topics include the cells and organs of the immune system, humoral and cellular immune responses, the generation of immune cells, and how immune cells fight various infectious pathogens. Coreq: BMS 715 for BMS:MM majors only.
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-.
Equivalent(s): MICR 705
Grade Mode: Letter Grading

BMS 706 - Virology
Credits: 3
Principles of animal and selected plant and bacterial virology in relation to infection and disease. Emphasizes the molecular biology of viruses, viral replication, isolation, propagation, assay, pathogenesis, diagnosis, detection, epidemiology, and control. Coreq: BMS 708 for BMS:MM majors only.
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-.
Equivalent(s): MICR 706
Grade Mode: Letter Grading

BMS 708 - Virology Laboratory
Credits: 2
Principles and practices of animal, selected plants, and bacterial virological methods for the propagation, detection and enumeration of viruses.
Co-requisite: BMS 706
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

BMS 712 - Experiences in Applied Veterinary Diagnostics
Credits: 2
Students interact with different components of a working veterinary diagnostic laboratory. Through group reviews of New Hampshire Veterinary Diagnostic Lab cases, students learn about diseases using cases tailored to individual student interests. Pathologists and NHVDL staff provide information on disease processes, pathogenesis, and testing modalities. Students observe diagnostic techniques and archived gross and digital tissue specimens. Emphasis is on integrating knowledge of anatomy, physiology, microbiology, immunology, etc. within the context of molecular pathogenesis.
Prerequisite(s): (BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-) or (ANSC 511 with a minimum grade of D- and ANSC 512 with a minimum grade of D-).
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

BMS 715 - Immunology Laboratory
Credits: 2
This applied immunology laboratory course highlights both historic and current methodologies important for elucidation and diagnosis of immune function. Techniques used to study phagocytosis, antibody production, immunodiffusion, and T-cell function will be introduced. Applications of the antibody technologies to other scientific disciplines (ELISA, immunofluorescence microscopy, immunoblotting, etc.) will also be covered.
Co-requisite: BMS 705
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-.
Equivalent(s): MICR 715
Grade Mode: Letter Grading
Special Fee: Yes

BMS 718 - Mammalian Physiology
Credits: 4
Advanced study of the systems that control mammalian functions with emphasis on cellular and molecular mechanisms. Includes the nervous, muscular, cardiovascular, renal, gastrointestinal, and endocrine systems.
Attributes: Writing Intensive Course
Prerequisite(s): BMS 507 with a minimum grade of D- or BMS 508 with a minimum grade of D- or ANSC 511 with a minimum grade of D- or ANSC 512 with a minimum grade of D-.
Equivalent(s): ANSC 718
Grade Mode: Letter Grading

BMS 719 - Host-Microbe Interactions
Credits: 4
An examination of the way microorganisms interact with their hosts, with an emphasis on the pathogenic and commensal organisms of humans. Course material is introduced via reading, analysis and group presentations of primary scientific literature. Students are not only introduced to different types of host-microbe interactions, but different methods, systems and model organisms used to study these interactions.
Prerequisite(s): (BMS 501 with a minimum grade of D- or (BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-)) and GEN 604 with a minimum grade of D-.
Grade Mode: Letter Grading

BMS 720 - Mycology, Parasitology, and Virology
Credits: 3
Theoretical basis of the pathogenesis, epidemiology, and diagnosis of fungal, parasitic, and viral infections.
Prerequisite(s): BMS 602 with a minimum grade of D- and BMS 603 with a minimum grade of D-.
Grade Mode: Letter Grading

BMS 721 - Mycology, Parasitology, and Virology Laboratory
Credits: 2
Practical experience in medical mycology and parasitology diagnostic techniques. Isolation and identification of mycological and parasitological specimens. Principles and practices of proper specimen collections, analysis, and interpretation of results.
Co-requisite: BMS 720
Equivalent(s): MLS 720L, MLS 721
Grade Mode: Letter Grading
Special Fee: Yes

BMS 725 - Cell Phenotyping and Tissue Engineering Laboratory
Credits: 4
Introduction to culture and phenotyping of mammalian cells (cell line models), with applications to bioengineering and biomedical sciences. Skills, techniques, and knowledge covered include sterile technique, cell culture, cell line models, cell proliferation, cell survival, cell migration, cell adhesion, and drug response. Inquiry-based team projects investigate cell proliferation, cell death, transfection, flow cytometry, 3D scaffolds, or cell imaging.
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-.
Equivalent(s): BMS 620
Grade Mode: Letter Grading
Special Fee: Yes

BMS 730 - Ethical Issues in Biomedical Science
Credits: 4
An examination of the importance of scientific integrity in the biomedical sciences. Students are introduced to the ethical issues that scientists must be familiar with when conducting research. Issues include scientific record keeping, authorship and peer review, conflicts of interest, use of animals and humans in research, and recombinant DNA technology. Class is discussion-based, encouraging both an appreciation of established guidelines and an opportunity to critically examine them.
Attributes: Writing Intensive Course
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and GEN 604 with a minimum grade of D- and BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-.
Equivalent(s): MICR 718
Grade Mode: Letter Grading

BMS 735 - Molecular and Cellular Parasitology
Credits: 4
Parasites continue to present a major challenge to public health. Despite their significant impact on human health, many aspects of the molecular and cellular biology of these diverse organisms remain unknown. This course explores the latest research on these fascinating organisms through analysis and discussion of original research papers focusing on three of the major human parasites.
Attributes: Writing Intensive Course
Prerequisite(s): BMS 503 with a minimum grade of D- and GEN 604 with a minimum grade of D- and (BMS 655 with a minimum grade of D- or BMS 720 with a minimum grade of D-).
Grade Mode: Letter Grading

BMS 740 - Human Microbiome
Credits: 4
The human microbiome is a new, rapidly growing field of microbiology that has already made important contributions to the understanding of human health. This laboratory course utilizes current research methodology to investigate the microbiome of the human skin. Students gain hands-on experience in PCR, genomics, bioinformatics, and modern clinical identification techniques. They also generate primary data to make their own contribution to this important field of research. Lab.
Prerequisite(s): (BMS 501 with a minimum grade of D- or (BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-) and GEN 604 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

BMS 747 - Case Studies in Bloodbanking
Credits: 1
Patient case studies are analyzed in immunohematology. Correlation of patient history with clinical presentation and interpretation of clinical laboratory results. Learn to interpret given information, recognize abnormal results and their clinical significance, generate etiologic possibilities, and determine the best diagnosis for the patient condition including appropriate treatment and recommended follow-up testing.
Prerequisite(s): BMS 656 with a minimum grade of D- and BMS 657 with a minimum grade of D-.
Grade Mode: Letter Grading

BMS 748 - Case Studies in Medical Biochemistry
Credits: 1
Patient case studies are analyzed in medical biochemistry. Correlation of patient history with clinical presentation and interpretation of clinical laboratory results. Learn to interpret given information, recognize abnormal results and their clinical significance, generate etiologic possibilities, and determine the best diagnosis for the patient condition including appropriate treatment and recommended follow-up testing.
Prerequisite(s): BMS 658 with a minimum grade of D- and BMS 659 with a minimum grade of D-.
Grade Mode: Letter Grading

BMS 749 - Case Studies in Hematology and Immunology
Credits: 2
Patient case studies are analyzed in hematology and immunology. Correlation of patient history with clinical presentation and interpretation of clinical laboratory results. Learn to interpret given information, recognize abnormal results and their clinical significance, generate etiologic possibilities, and determine the best diagnosis for the patient condition including appropriate treatment and recommended follow-up testing.
Attributes: Writing Intensive Course
Prerequisite(s): BMS 642 with a minimum grade of D- and BMS 643 with a minimum grade of D- and BMS 644 with a minimum grade of D- and BMS 645 with a minimum grade of D-.
Grade Mode: Letter Grading

BMS 750 - Case Studies in Microbiology
Credits: 3
This course will draw upon microbiology knowledge gained in previous courses. The case studies discussed will broaden student understanding of clinical and diagnostic information as they relate to microbial pathogens. Additionally, students will work to recognize abnormal results, their clinical significance, and generate etiologic possibilities. Clinical test results will be used to determine the diagnosis for the patient condition, appropriate treatment, and recommended follow-up testing.
Attributes: Writing Intensive Course
Prerequisite(s): BMS 602 with a minimum grade of D- and BMS 603 with a minimum grade of D- and BMS 720 with a minimum grade of D- and BMS 721 with a minimum grade of D-.
Grade Mode: Letter Grading

BMS 751 - Advanced Clinical Microbiology Internship
Credits: 4
Instruction and clinical practice of microbiology-related techniques and their applications in the medical laboratory setting. Includes the principles and practices of proper specimen collection, clinical diagnosis testing, and interpretation of results.
Prerequisite(s): BMS 720 with a minimum grade of D- and BMS 721 with a minimum grade of D-.
Equivalent(s): BMS 751W
Grade Mode: Letter Grading
Special Fee: Yes

BMS 752 - Advanced Hematology Internship
Credits: 4
Instruction and clinical practice of hematology-related techniques and their applications in the medical laboratory setting. Includes the principles and practices of special hematology procedures including diagnostic staining, advanced hemostasis studies, and evaluation of blood cells in disease states.
Equivalent(s): BMS 752W
Grade Mode: Letter Grading

BMS 753 - Advanced Immunohematology Internship
Credits: 4
Introduction and clinical practice of immunohematology-related techniques and their applications in the medical laboratory setting. Includes the principles and practices of advanced blood-banking procedures, including antibody identification, and component therapy.
Prerequisite(s): BMS 656 with a minimum grade of D-.
Equivalent(s): BMS 753W
Grade Mode: Letter Grading

BMS 754 - Advanced Clinical Chemistry Internship
Credits: 4
Instruction and clinical practice of clinical chemistry-related techniques and their applications in the medical laboratory setting. Includes the principles and practices of advanced laboratory analysis of body fluid chemistries. Enzymology, isotopes, hormones, blood gases, and toxicology. Theory, operation, evaluation and maintenance of automated chemistry systems.
Prerequisite(s): BMS 658 with a minimum grade of D-.
Equivalent(s): BMS 754W
Grade Mode: Letter Grading

BMS 780W - Clinical Human Pathophysiology
Credits: 3
This course provides an in-depth exploration of the mechanisms of disease, emphasizing the physiological dysfunction resulting in clinical symptomology. Students will examine the etiology, progression, clinical manifestations, and therapeutic foundations of major pathological conditions affecting bodily systems. We will approach pathophysiology through a biomedical and physiological focus on disorders of morphologic, genetic, infectious, inflammatory, developmental, autoimmune, or of acquired origin. Conditions managed primarily through lifestyle changes, nutritional, or behavioral intervention are excluded, as this course emphasizes underlying pathophysiological mechanisms.
Attributes: Writing Intensive Course
Prerequisite(s): BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-.
Grade Mode: Letter Grading

BMS 790 - Undergraduate Teaching Experience
Credits: 1-4
Provide academic support to graduate teaching assistants or faculty in preparing, presenting, and executing Biomedical Science lectures or labs.
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): MICR 790
Grade Mode: Letter Grading

BMS 795 - Investigations in Biomedical Science
Credits: 1-8
Advanced research or scholarly projects developed and conducted under the supervision of a faculty member. Provides the opportunity to apply knowledge and techniques of the major to a specific problem or question.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): BMS 795W, MICR 795, MICR 795W
Grade Mode: Letter Grading

BMS 795W - Investigations in Biomedical Science
Credits: 1-8
Advanced research or scholarly projects developed and conducted under the supervision of a faculty member. Provides the opportunity to apply knowledge and techniques of the major to a specific problem or question.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): BMS 795, MICR 795W
Grade Mode: Letter Grading

BMS 799 - Senior Thesis
Credits: 1-4
Independent research project under the direction of a faculty sponsor for seniors in biomedical sciences. Final product is a written thesis. One or two semesters.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): BMS 799H
Grade Mode: Letter Grading

BMS 799H - Senior Honors Thesis
Credits: 1-4
Independent research project under the direction of a faculty sponsor for seniors in biomedical sciences and in the Honors Program. Final product is a written thesis. One or two semesters.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): BMS 799
Grade Mode: Letter Grading

Biotechnology (BIOT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

BIOT 415 - Millyard Scholars Seminar
Credits: 2
Through in-class activities, workshops and guest speakers, students in the Millyard Scholars Program will explore career paths, and develop resources and skills for academic success. All student work, planning and experiences will be showcased in a digital portfolio.
Equivalent(s): BSCI 415
Grade Mode: Letter Grading

BIOT 418 - Phage Bioinformatics Lab
Credits: 2
In the course, students undertake a hands-on undergraduate research experience to describe, document, and publish the discovery of new bacteriophages (bacterial viruses). In doing so, students will elucidate how the genome codes biological information. The aim of the course is for students to develop further research and computational analysis skills while preparing to publish their scientific discoveries. The course will focus on research data analysis and presentation of research data to scientists and the public.
Equivalent(s): BSCI 418
Grade Mode: Letter Grading

BIOT 501 - Ethical Issues in Biology
Credits: 4
This course is an introduction to the ethical issues associated with current and future use of biotechnology. Students will think critically about different ethical problems that emerge from scientific research and its applications to medical technology. The focus will be on personal and public policy decision making.
Attributes: Writing Intensive Course
Prerequisite(s): (BIOL 413 with a minimum grade of C- and BIOL 414 with a minimum grade of C-) or (BIOL 411 with a minimum grade of C- and BIOL 412 with a minimum grade of C-).
Equivalent(s): BSCI 501
Grade Mode: Letter Grading

BIOT 510 - Introduction to Biofabrication
Credits: 4
This project-based course introduces students to the techniques and challenges of biofabrication. Students learn how additive manufacturing is used to combine cells with a variety of biolinks to create living tissues such as skin, cartilage, vascularized bone, and blood vessels. During this process students learn how to design for and operate 3D printing and bioprinting equipment. An emphasis will be placed on the ways in which this emerging technology impacts our society.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): BSCI 510
Grade Mode: Letter Grading

BIOT 655 - Advanced Phage Biology
Credits: 4
Students undertake an advanced exploration of bacteriophage biology through wet-lab and/or bioinformatic investigation of previously-discovered bacterial viruses. In the setting of bacteriophage genome study, students develop working fluency with coding of genetic information, annotation of genomes, publication and presentation of discoveries, and design of experiments to assess questions in viral structure and function.
Prerequisite(s): BSCI 418 with a minimum grade of C- or BMS 503 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

BIOT 704 - New and Emerging Biotechnology
Credits: 4
In this course students investigate emerging technologies, innovations and new products in the biotechnology industry, through case studies and scientific literature. Modern biotechnology focuses mainly on medicine. New treatments for rare and complex diseases as well as genetic testing to identify genetically-inherited diseases are continually being developed and discovered. Technology that makes these and other advances possible is the focus of this course.
Attributes: Writing Intensive Course
Prerequisite(s): GEN 604 with a minimum grade of C-.
Grade Mode: Letter Grading

BIOT 730 - Neurobiotechnology
Credits: 4
Why is the human brain so difficult to understand? When scientists uncover basic science principles of the neuron, how does that scale up to system-wide understanding or to clinical treatments? The instruments that help us investigate the function of an individual neuron are very different from the instruments needed to parse subjective human experience. This notion of scale, in both time and space, will be integral to exploring the obstacles of neuroscience research and to surveying the neurobiotech tools that help answer these difficult questions.
Grade Mode: Letter Grading

BIOT 753 - Cell Culture Lecture
Credits: 3
Fundamental biological principles that underlie cell culture and its applications are the foundation of the lecture component of this course. Applications of cell culture techniques to current research areas in academic and biopharmaceutical settings will be discussed.
Co-requisite: BIOT 754
Prerequisite(s): BMS 503 with a minimum grade of C- and BMS 504 with a minimum grade of C-.
Equivalent(s): BENG 620, BMCB 753, BMS 620
Grade Mode: Letter Grading

BIOT 754 - Cell Culture Lab
Credits: 3
Fundamental biological principles that underlie cell culture and its applications are the foundation of the lecture component of this course. Applications of cell culture techniques to current research areas in academic and biopharmaceutical settings will be discussed.
Co-requisite: BIOT 753
Prerequisite(s): BMS 503 with a minimum grade of C- and BMS 504 with a minimum grade of C-.
Equivalent(s): BENG 620, BMCB 753, BMS 620
Grade Mode: Letter Grading
Special Fee: Yes

BIOT 755 - Advanced Therapies
Credits: 4
In this course students will gain an understanding of the fundamentals of biomaterials, gene therapy, cell therapy, and tissue engineering. We will cover chemical, structural, and biological aspects of therapeutic materials along with systemic literature reviews involving advanced therapy medical products (ATMPs) utilizing molecules, genes, cells, and tissues. We will also discuss synthetic polymers and biomolecules such as peptides, proteins, polysaccharides and oligonucleotides. No credit for students who have taken BSCI 797 "SpcTop/Advanced Therapies".
Prerequisite(s): CHEM 404 with a minimum grade of C- and (BIOL 414 with a minimum grade of C- or BIOL 412 with a minimum grade of C-).
Grade Mode: Letter Grading

BIOT 760 - Numerical & Statistical Analysis in Biotechnology
Credits: 0 or 4
In this course, students will gain an understanding of how best to conduct data analysis experiments utilizing data specific to biotechnology applications. Hands-on exercises involve using computer software programs such as Matlab and JMP. Data input/manipulation, descriptive and inferential statistics, hypothesis testing, curve fitting, and Matlab coding will be covered. Upon completion of the course, students should be able to conduct data analysis experiments within the context of biotech. No credit for students who have taken BSCI 797 "SpcTop/Num & Statistical Analysis".
Prerequisite(s): CHEM 403 with a minimum grade of C- and (BIOL 413 with a minimum grade of C- or BIOL 411 with a minimum grade of C-).
Grade Mode: Letter Grading

BIOT 766 - Protein and Immunologic Techniques Lab
Credits: 3
Laboratory course focused on application of molecular biology techniques for the isolation, quantitation, detection, analysis, and use of proteins. Substantial emphasis on the use of immunoassays and antibodies in protein work. Modern proteomics techniques are also discussed. Emphasis on recombinant protein expression in the field of biotechnology.
Co-requisite: BIOT 767
Prerequisite(s): GEN 604 with a minimum grade of C-.
Equivalent(s): BSCI 766
Grade Mode: Letter Grading
Special Fee: Yes

BIOT 767 - Protein and Immunologic Techniques
Credits: 3
Laboratory course focused on application of molecular biology techniques for the isolation, quantitation, detection, analysis, and use of proteins. Substantial emphasis on the use of immunoassays and antibodies in protein work. Modern proteomics techniques are also discussed. Emphasis on recombinant protein expression in the field of biotechnology.
Co-requisite: BIOT 766
Prerequisite(s): GEN 604 with a minimum grade of C-.
Grade Mode: Letter Grading

BIOT 770 - Stem Cell and Biomaterials Engineering Lab
Credits: 3
Introduction to stem cells and how biomaterials are utilized in their applications involving biotechnology and biomedical engineering. Lab topics such as aseptic technique, stem cell cultures, biomaterials engineering, bioprinting, biocompatibility and bioactivity analyses will be covered. Lectures will focus on the current literature while the lab portion involves inquiry-based projects that will investigate how biomaterials and molecules modulate stem cell proliferation and differentiation.
Co-requisite: BIOT 771
Prerequisite(s): CHEM 403 with a minimum grade of C- and (BIOL 414 with a minimum grade of C- or BIOL 412 with a minimum grade of C-).
Grade Mode: Letter Grading

BIOT 771 - Stem Cells and Biomaterials Engineering
Credits: 3
Introduction to stem cells and how biomaterials are utilized in their applications involving biotechnology and biomedical engineering. Lecture topics will include aseptic technique, stem cell cultures, biomaterials engineering, bioprinting, biocompatibility and bioactivity analyses will be covered. Lectures will focus on both traditional contents and the current literature. There will be a focus on preparing a research proposal and a final review paper that will summarize how specific biomaterials coupled with soluble factors allow for stem cell engineering.
Co-requisite: BIOT 770
Prerequisite(s): (BIOL 414 with a minimum grade of C- or BIOL 412 with a minimum grade of C-) and CHEM 403 with a minimum grade of C-.
Grade Mode: Letter Grading

BIOT 772 - Pluripotent Stem Cell Laboratory
Credits: 3
Introduction to human pluripotent stem cells (hPSCs) and how they are utilized in biomedical applications. Labs will focus on hPSC basic training and pluripotent stem cell characterizations before and after differentiation. Special focus will be given to induced pluripotent stem cell (iPSC) culture systems and their applications. Students must have previous cell culture experience.
Co-requisite: BIOT 773
Prerequisite(s): (BIOT 753 with a minimum grade of D- and BIOT 754 with a minimum grade of D-) or BIOT 770 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

BIOT 773 - Pluripotent Stem Cells in Research
Credits: 3
Introduction to human pluripotent stem cells (hPSCs) and how they are utilized in biomedical research. Lecture topics will include basic hPSC techniques, derivation and differentiation of hPSCs. Lectures will focus on both traditional content and the current literature including industry practices. There will be a focus on preparing a research proposal and a final review paper that will summarize how specific biomaterials coupled with soluble factors allow for stem cell engineering.
Co-requisite: BIOT 772
Prerequisite(s): (BIOT 753 with a minimum grade of D- and BIOT 754 with a minimum grade of D-) or BIOT 770 with a minimum grade of D-.
Grade Mode: Letter Grading

BIOT 775 - Biopharmaceutical Production Processes
Credits: 0 or 5
This course will provide students with an overview of biopharmaceutical production processes through lectures. The course begins by introducing students to the proteins and biotechnology companies and to cGMP. During lab, students will use mammalian cells to produce and monoclonal antibody, by developing manufacturing SOPs, including upstream and downstream processing, and quality control and assurance. Students will also gain experience with T-cell culture as part of the CAR-T technology utilized in personal medicine.
Prerequisite(s): CHEM 651 with a minimum grade of C- and CHEM 653 with a minimum grade of C-.
Mutual Exclusion: No credit for students who have taken ANSC 651, CHBE 651, CHE 651.
Grade Mode: Letter Grading

BIOT 777 - Molecular Biology and Biotechnology Lab
Credits: 3
The organization, expression, and control of RNA and protein-coding genes in prokaryotic an eukaryotic cells. The focus of the course is on mechanisms of genetics at the molecular level and the application of modern techniques to laboratory biotechnology projects.
Co-requisite: BIOT 778
Prerequisite(s): GEN 604 with a minimum grade of C-.
Equivalent(s): BSCI 777
Grade Mode: Letter Grading
Special Fee: Yes

BIOT 778 - Molecular Biology and Biotechnology
Credits: 3
The organization, expression, and control of RNA and protein-coding genes in prokaryotic and eukaryotic cells. The focus of the course is on mechanisms of genetics at the molecular level and the application of modern techniques to laboratory biotechnology projects.
Co-requisite: BIOT 777
Prerequisite(s): GEN 604 with a minimum grade of C-.
Grade Mode: Letter Grading

BIOT 780 - Techniques in Microscopy and Image Analysis
Credits: 0 or 4
Laboratory course focused on application of microscopy techniques (light, fluorescent, confocal) and the subsequent analysis strategies for investigating biological specimens. Special focus will be directed towards cellular microscopy-based assays, both structural and functional. Image analysis topics will touch on filtering, segmentation, and registration.
Prerequisite(s): BMS 504 with a minimum grade of C-.
Grade Mode: Letter Grading

BIOT 788 - Advanced Studies
Credits: 1-2
Advanced scholarly work at the undergraduate level supervised by a graduate faculty member for students enrolled in Accelerated Masters programs. The particular area of study will vary according to the semester or the specific course offering with which this course is paired.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

BIOT 799 - Seminar in Biotechnology
Credits: 2
The seminar in biotechnology will run from time to time with different topics, including the following: 1) Cutting-edge issues facing the biotechnology industry. 2) Instrumentation and technologies utilized in the biotechnology industry.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

Business (BUS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

BUS 400 - Introduction to Business
Credits: 4
Introduces the study of business: examines the origins and development of American business, its place in a global economy, and its legal and ethical roles in modern society. Includes an overview of the functional areas of business such as finance, marketing, and organizational behavior. Designed for business majors as well as for students considering a major in business.
Equivalent(s): ADMN 400
Grade Mode: Letter Grading

BUS 405 - Introduction to Business Computer Applications
Credits: 4
This course is designed to prepare students for both their computer related course work in other classes, but also for both internship and permanent professional problems. The skills and knowledge contained in this class are critical to early student success, and should be taken on arrival to the UNHM Business program. These skills are: word processing, presentation development, database creation and access, and spreadsheet data display and analysis. Open to all majors.
Equivalent(s): COMP 411
Grade Mode: Letter Grading

BUS 430 - Introduction to Business Statistics
Credits: 0 or 4
The use of statistical methods for managerial decision making. Emphasis is on understanding concepts, including inferences from sample data and model formulation, as aids in decision-making. Lab: Using class-focused statistics problems, designed to provide opportunity to develop course-specific problem solving strategies; to adapt from mathematical to statistical thinking; to analyze and communicate significance and meaning of numerical outcomes; to develop course-specific test taking prowess.
Attributes: Quantitative Reasoning(Disc)
Prerequisite(s): MATH 420 with a minimum grade of D- or MATH 422 with a minimum grade of D- or MATH 425 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken ADM 430, ADMN 420, ADMN 510, BIOL 528, EREC 525, HHS 540, MATH 439, MATH 539, MATH 644, MTH 504, PSYC 402, PSYC 402H, SOC 402, SOC 402H, SOC 502, SOC 502H.
Grade Mode: Letter Grading

BUS 453 - Leadership for Managers
Credits: 4
This course provides the critical element of analytical and intellectual examination and reflection of certain core issues in the practice of leadership. These objectives are achieved through open discussion, honest self-assessment, experiential exercises, and observation of real-life leadership practice. What is valued in this course are honest relationships and dialogue, risk-taking, dedication to the topic of leadership, initiative, and exploring the confusion and gray areas involved in these topics.
Prerequisite(s): BUS 400 with a minimum grade of D-.
Grade Mode: Letter Grading

BUS 492 - American Business History
Credits: 4
This course explores the historical development of American business institutions from the colonial era to the present. Thematic units organize the material focusing in turn on the most significant developments in the American business environment. The goal is a cumulative understanding of the development of the system. A great deal of our discussion and reading centers on the interaction of market operations and social values and how these interactions influenced the business environment at different times. It is the study of business in the context of past times that makes this course different from a course in business methods or institutions. Through the study of the past students develop their critical thinking and writing skills.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

BUS 515 - Introduction to Business Analytics
Credits: 4
This course provides introductory review and application of data analytics in business, including the analysis of raw data in datasets and how it can be transformed into usual visualizations. Students will practice the use of several data analytics tools, such as Excel, and review the use of Tableau and Power BI. Students should have access to a current version of Excel on a laptop or Mac (Excel online version will not work correctly).
Mutual Exclusion: No credit for students who have taken DAT 510.
Grade Mode: Letter Grading

BUS 530 - Personal Finance
Credits: 4
This course is designed to give students some expertise in the life decisions that almost everyone must make concerning tax planning, purchasing or renting of a home or automobile, medical, life, auto and home insurance needs. Investments and planning for retirement among other financial decisions that adults must make.
Attributes: Quantitative Reasoning(Disc)
Grade Mode: Letter Grading

BUS 532 - Introduction to Financial Accounting
Credits: 4
Fundamental concepts of accounting and their impact on the business world and society as a whole. Emphasis on the recording of economic transactions, and preparation and analysis of financial statements. No credit for students who have had ACFI 501, ACFI 502, ADMN 502.
Mutual Exclusion: No credit for students who have taken ACCT 532.
Grade Mode: Letter Grading

BUS 533 - Introduction to Managerial Accounting
Credits: 4
Emphasizes how organizational managers use accounting information to support their functions of planning, control, and decision making. Examples taken from corporations, small business, and not-for-profit organizations. No credit for students who have received credit for ACFI 503, ADMN 503.
Mutual Exclusion: No credit for students who have taken ACCT 533.
Grade Mode: Letter Grading

BUS 535 - Federal Taxation
Credits: 4
Introduction to the basics of the federal income tax rules for individuals. Basic concepts in federal taxation include gross income, exclusions, adjusted gross income, deductions, exemptions, and credits. Additional tax concepts included are cash and accrual methods, passive loss rules, and like-kind exchange. No credit for taking BUS 710 (Federal Taxation) or BUS 675 (Special Topic Federal Taxation).
Equivalent(s): BUS 710
Grade Mode: Letter Grading

BUS 565 - Selling and Sales Management
Credits: 4
The sales and selling management (SSM) course covers both the strategies, and the tactics, of selling, from the wide-ranging perspectives of sales people and customers. Management topics include: motivation and behavior, sales methodologies, channel optimization, recruiting and selecting representatives, training, compensation, and evaluation. Class also covers in-depth through the class practice sales tactics such as: prospecting and sales call planning, communicating the sales message, negotiating for win-win situations, overcoming objections, closing the sale, and follow-up management. Reflecting the nature of practice selling, the SSM course is offered in a short series of longer days. BUS 400 or BUS 610 are encouraged to take prior to this course. No credit earned if credit earned for BUS 675 if listed as Selling and Sales Management.
Grade Mode: Letter Grading

BUS 575 - Students Consulting Organizations
Credits: 2
A hands-on course where students will work directly with organizations in the Manchester area helping to solve, marketing, financial, managerial, and technology issues. Clients are secured through the SBDC at UNH. The class will meet once a week for one hour where strategy sessions with the clients take place, lectures on business strategy are given, and presentations from guest speakers will be given. It is expected that students will have to do some outside work based on the needs of the clients. At the end of the semester, students will make a formal, professional presentation and provide a document for action to the client. This course can be applied to the management option requirement.
Prerequisite(s): BUS 400 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

BUS 601 - Financial Management
Credits: 4
Study of investment, finance, and dividend decisions of the business firm. Topics include capital budgeting, designing and issuing securities, management of working capital and evaluating manager performance.
Prerequisite(s): BUS 400 with a minimum grade of D- and BUS 532 with a minimum grade of D- and BUS 533 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken FNC 665.
Grade Mode: Letter Grading

BUS 603 - Intermediate Financial Accounting I
Credits: 4
The first of two in-depth financial accounting courses. Course provides student with the in-depth understanding of the theory, conceptual framework, and development of generally accepted accounting principles giving them the knowledge necessary to properly account for and present information in financial statements prepared for external uses. Topics include the income statement, the statement of cash flows and balance sheet with an emphasis on asset accounts. No credit if credit received for BUS 675 Intermediate Accounting I.
Prerequisite(s): BUS 532 with a minimum grade of D- and BUS 533 with a minimum grade of D-.
Grade Mode: Letter Grading

BUS 610 - Marketing Principles and Applications
Credits: 4
Studies the process of planning and distributing goods and services to the marketplace. Topics include product planning, pricing, promotion, and distribution. Emphasis on the application of marketing principles to real world business cases.
Prerequisite(s): BUS 400 with a minimum grade of D- and (ECN 412 with a minimum grade of D- or ECN 412W with a minimum grade of D-).
Equivalent(s): ADMN 585
Mutual Exclusion: No credit for students who have taken MKT 510.
Grade Mode: Letter Grading

BUS 615 - Intermediate Financial Accounting II
Credits: 4
The second of two in-depth financial accounting courses. Course provides students with an in depth understanding of the theory, conceptual framework, and development of generally accepted accounting principles giving them the knowledge necessary to properly account for and present information in financial statements prepared for external users. Topics include time value of money, current and non-current liabilities, leases, deferred taxes, retirement benefits, stockholders equity, earning per share, accounting changes and errors, and statement of cash flows. No credit if credit received for BUS 675 Intermediate Accounting.
Prerequisite(s): BUS 603 with a minimum grade of D-.
Grade Mode: Letter Grading

BUS 620 - Organizational Behavior
Credits: 4
Applications of behavioral science concepts to work settings. Topics include worker incentives and perceptions toward work, group versus individual decision making, conflict resolution, interpersonal and leadership skills, and the study of other behaviors relevant to effective managing of a business organization.
Attributes: Writing Intensive Course
Prerequisite(s): PTC 500 with a minimum grade of D-.
Equivalent(s): ADMN 575
Mutual Exclusion: No credit for students who have taken MGMT 566.
Grade Mode: Letter Grading

BUS 640 - Business Communication and Conflict
Credits: 4
This course is designed to give students a comprehensive view of communication, its scope and importance in business, and the role of communication in establishing a favorable outside the firm environment as well as an affective internal communications program. The various types of business communication media are covered. This course also develops an awareness of the importance of succinct written expression to modern business communication.
Prerequisite(s): BUS 455 with a minimum grade of D-.
Equivalent(s): ADM 640
Grade Mode: Letter Grading

BUS 645 - Real Estate Investment & Finance
Credits: 4
Learn and appreciate the value of owning real estate, whether as a homeowner or investor. Explore real estate principles, issues of legal protection, mortgage techniques, appraisal, brokerage, risk analysis, investment analysis for commercial properties and apartments, construction, and real estate development financing, as well as documents used in this field. This course explores real estate as a vehicle for profit. The theory of value and the methods to evaluate value are learned, so as to allow entry into banking, private or institutional investment, or general real estate fields. The gathering of data and establishing investment criteria, tempered by risk analysis and the constraints of available financial resources, forms the focus of the course.
Grade Mode: Letter Grading

BUS 662 - Digital Marketing Applications
Credits: 4
This course introduces students to a broad range of marketing applications and digital marketing concepts. The goal is to provide them with hands-on learning opportunities to apply these concepts to real-world marketing problems. A range of marketing and data management tools will be taught to foster understanding and student credentialing on a variety of key 'Software as a Service' platforms. No credit if students have taken BUS 675 - Special Topics - Marketing Demand Applications.
Prerequisite(s): BUS 400 with a minimum grade of D- and BUS 610 with a minimum grade of D-.
Grade Mode: Letter Grading

BUS 663 - Services Marketing and Operations Management
Credits: 4
This course is designed to prepare students for NH business and marketing careers by understanding the issues, challenges, and terminology inherent in industries as diverse as health care, construction, education, professional and technical offices, transportation, information and publishing, tourism, retailing, etc. Case studies are used throughout the term. We study many of these sectors, both as academicians and as consumers, to build a portfolio of understanding across divergent sectors. Students learn about services marketing strategies and management models that: increase customer satisfaction, improve customer retention and create dominant service brands that can create a competitive advantage for firms in any given industry. No credit if credit earned for BUS 675 or BUS 685 if listed as Services Marketing.
Prerequisite(s): BUS 400 with a minimum grade of D- and BUS 610 with a minimum grade of D-.
Grade Mode: Letter Grading

BUS 675 - Special Topics in Business Administration
Credits: 1-4
Provides students with an opportunity to explore a topic in business administration such as marketing, management, finance, or accounting. Topics will vary. Barring duplication of subject, may be repeated for credit.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

BUS 690 - Business Program Internship
Credits: 1-4
Supervised internship practicum within the private, public or non-profit sector. Focus is for the student to gain valuable insights into both professional and managerial positions, applying their college knowledge to a variety of roles and projects, influencing their career trajectory through 'real world' experience. Can be taken multiple times for credit, with credit varying from 1-4 hours based on time spent on the internship. For the 16 credit concentration, up to 4 BUS 690 credits can be applied. Credits beyond will be applied to general credits. Does not substitute for the internship required as part of the Business Capstone Course BUS 750 - Business Internship Senior Seminar. Offered, Fall, Spring and Summer.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Credit/Fail Grading

BUS 695 - Independent Study in Business
Credits: 1-4
Independent study exploring a special topic emphasizing the managerial, organizational, strategic, political or economic context(s) within which business decisions are made.
Prerequisite(s): BUS 400 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ADM 695
Grade Mode: Letter Grading

BUS 705 - Business Ethics
Credits: 4
Because Business Ethics is a capstone course, it is imperative that students understand the business psychology concepts relative to power, politics, communication, and decision making to name a few. Organizational Behavior provides knowledge in those areas and this will give students greater depth and cognitive analysis when addressing and applying principles in the ethics course.
Attributes: Writing Intensive Course
Prerequisite(s): BUS 620 with a minimum grade of D- and BUS 610 with a minimum grade of D-.
Grade Mode: Letter Grading

BUS 712 - Accounting Information Systems
Credits: 4
Course centers on how organizations collect, record, process, and store accounting information and data. Topics include information systems concepts, transaction cycles and processing, flowcharting, XBRL, e-business and ERP systems, computer fraud and IT security, internal controls, auditing with AIS, Quickbooks processing, and ethics. Topics include introduction to data analytics and blockchain technology.
Prerequisite(s): BUS 615 with a minimum grade of D-.
Grade Mode: Letter Grading

BUS 720 - Auditing
Credits: 4
Introduction to the basics of auditing and other assurance services theory and practice. It provides an overview and understanding of the public accounting profession and the professional auditing standards. The class also integrates auditing material with previous financial and managerial accounting course. No credit if credit received for BUS 675 Auditing.
Prerequisite(s): BUS 532 with a minimum grade of D- and BUS 533 with a minimum grade of D- and BUS 603 with a minimum grade of D- and BUS 615 with a minimum grade of D-.
Grade Mode: Letter Grading

BUS 725 - Financial Statement Analysis
Credits: 4
This course will examine: financial reporting, the quality of accounting information, and US GAPP and IFRS. The flexibility which is built into GAAP will be examined, noting how firms may take advantage of this flexibility to manipulate financial information while staying within the bounds of the rules for proper reporting. Also examined will be the relationships found within the reported numbers by comparing various elements of the financial statements.
Prerequisite(s): BUS 720 with a minimum grade of D-.
Grade Mode: Letter Grading

BUS 750 - Business Capstone Senior Seminar - Internship
Credits: 4
The capstone seminar course in which students complete their degree with an internship, while also conducting case analyses, class exercises, and a variety of reflective writings via selected readings. written and oral student reports.
Prerequisite(s): BUS 400 with a minimum grade of C- and BUS 405 with a minimum grade of C- and BUS 430 with a minimum grade of C- and BUS 532 with a minimum grade of C- and BUS 533 with a minimum grade of C- and BUS 610 with a minimum grade of C- and BUS 620 with a minimum grade of C- and BUS 690 with a minimum grade of C- and BUS 705 with a minimum grade of C- and ECN 411 with a minimum grade of C- and ECN 412 with a minimum grade of C- and (COMP 405 with a minimum grade of C- or COMP 415 with a minimum grade of C-) and (MATH 420 with a minimum grade of C- or MATH 425 with a minimum grade of C-) and PTC 500 with a minimum grade of C-.
Mutual Exclusion: No credit for students who have taken BUS 760.
Grade Mode: Letter Grading
Special Fee: Yes

BUS 760 - BUS SR SEM - Research Project
Credits: 4
The capstone seminar course is for students with extensive professional experience. Extensive independent research and writing required. Also conducting case analyses, class exercises, and a variety of reflective writings via selected readings, written and oral student reports.
Prerequisite(s): BUS 400 with a minimum grade of C- and BUS 405 with a minimum grade of C- and BUS 430 with a minimum grade of C- and BUS 532 with a minimum grade of C- and BUS 533 with a minimum grade of C- and BUS 610 with a minimum grade of C- and BUS 620 with a minimum grade of C- and BUS 690 with a minimum grade of C- and BUS 705 with a minimum grade of C- and ECN 411 with a minimum grade of C- and ECN 412 with a minimum grade of C- and (COMP 405 with a minimum grade of C- or COMP 415 with a minimum grade of C-) and (MATH 420 with a minimum grade of C- or MATH 425 with a minimum grade of C-) and PTC 500 with a minimum grade of C-.
Mutual Exclusion: No credit for students who have taken BUS 750.
Grade Mode: Letter Grading

Chemical Engineering & Bioengineering (CHBE)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CHBE 400 - Chemical and Bioengineering Lectures
Credits: 1
Introduces the profession, the process engineer as designer and problem solver; and the goals of the chemical engineering/bioengineering curriculum. Lectures by faculty and practitioners. Introduction to computer skills, engineering ethics, safety, and careers in chemical engineering and bioengineering.
Equivalent(s): CHE 400
Grade Mode: Credit/Fail Grading

CHBE 410 - Energy and Environment
Credits: 4
Energy supply in this country and the world; conventional fuel reserves: coal, oil, natural gas; alternative sources: nuclear, solar, geothermal, et. Forecasts and strategies to meet needs. Environmental pollution, sources, and economic and environmental impacts. Methods for pollution control. Regulatory standards for environmental protection.
Attributes: Physical Science(Discovery)
Equivalent(s): CHE 410
Grade Mode: Letter Grading

CHBE 501 - Material Balances
Credits: 3
Systems of units; material balances and chemical reactions; gas laws; phase phenomena.
Prerequisite(s): (MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-) and (CHEM 405 with a minimum grade of D- or (CHEM 403 with a minimum grade of D- and (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D-))).
Equivalent(s): CHE 501
Grade Mode: Letter Grading

CHBE 502 - Energy Balances
Credits: 3
Energy and material balances for systems with and without chemical reactions; design case studies.
Attributes: Inquiry (Discovery)
Prerequisite(s): (CHBE 501 with a minimum grade of D- or CHE 501 with a minimum grade of D-) and MATH 527 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): CHE 502
Grade Mode: Letter Grading

CHBE 601 - Fluid Mechanics and Unit Operations
Credits: 3
Continuity, momentum, and energy equations; laminar and turbulent flow in pipes; rheology. Applications to flow in porous media, filtration, and fluidization.
Prerequisite(s): CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-.
Equivalent(s): CHE 601
Grade Mode: Letter Grading

CHBE 602 - Heat Transfer and Unit Operations
Credits: 3
Thermal properties of materials, steady-state and transient conduction and convection; radiation; applications to heat exchangers and process equipment.
Prerequisite(s): CHBE 601 with a minimum grade of D- or CHE 601 with a minimum grade of D-.
Equivalent(s): CHE 602
Grade Mode: Letter Grading

CHBE 603 - Applied Mathematics for Chemical Engineers
Credits: 4
Mathematical modeling and analysis of chemical engineering problems. Analytical methods for firstand second-order differential equations; numerical solutions; series solutions; Bessel functions; Laplace transforms; matrix algebra. Interpretation and solution of partial differential equations. Lab.
Prerequisite(s): MATH 527 with a minimum grade of D- and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): CHE 603
Grade Mode: Letter Grading

CHBE 604 - Chemical Engineering Thermodynamics
Credits: 3
Volumetric and phase behavior of ideal and real gases and liquids; cycles; steady-flow processes; chemical equilibrium.
Prerequisite(s): MATH 527 with a minimum grade of D- and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): CHE 604
Grade Mode: Letter Grading

CHBE 612 - Chemical Engineering Laboratory I
Credits: 3
Selected experiments in fluid mechanics, heat transfer, and unit operations.
Attributes: Writing Intensive Course
Prerequisite(s): (CHBE 601 (may be taken concurrently) with a minimum grade of D- or CHE 601 with a minimum grade of D-) and (CHBE 602 (may be taken concurrently) with a minimum grade of D- or CHE 602 with a minimum grade of D-).
Equivalent(s): CHE 612
Grade Mode: Letter Grading

CHBE 614 - Separation Processes
Credits: 3
Adsorption, Chromatography, Membrane Separations, Liquid-liquid Extraction and Crystallization.
Prerequisite(s): CHBE 604 with a minimum grade of D- or CHE 604 with a minimum grade of D-.
Equivalent(s): CHE 614
Grade Mode: Letter Grading

CHBE 651 - Biotech Experience/Biomanufacturing
Credits: 4
Course begins by introducing students to the proteins and companies of biotechnology and to current good manufacturing practices.
For remainder of the course, students use cell culture of bacteria, mammalian and yeast cells to produce human proteins using the tools and manufacturing standards, operating procedures of biotechnology, including upstream and downstream processing of proteins, and quality control of protein production.
Prerequisite(s): (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): CHE 651
Mutual Exclusion: No credit for students who have taken BIOT 775.
Grade Mode: Letter Grading

CHBE 695 - Chemical Engineering Project
Credits: 1-4
Independent research problems carried out under faculty supervision.
Equivalent(s): CHE 695
Grade Mode: Letter Grading

CHBE 696 - Independent Study
Credits: 1-4
Permission of the adviser and department chairperson required; granted only to students having superior scholastic achievement.
Equivalent(s): CHE 696
Grade Mode: Letter Grading

CHBE 703 - Mass Transfer and Stagewise Operations
Credits: 3
Diffusion in gases, liquids, and solids; design and analysis of distillation, absorption, and other stagewise equipment and operations.
Prerequisite(s): CHBE 604 with a minimum grade of D- or CHE 604 with a minimum grade of D-.
Equivalent(s): CHE 703
Grade Mode: Letter Grading

CHBE 705 - Fossil Fuels and Renewable Energy Sources
Credits: 4
Processing and refining of coal, crude oil, natural gas, tar sands and shale oil. Biomass co-combustion, biofuel extraction, impediments to widespread utilization. Exploration of environmental issues with energy generation and consumption. Lab.
Prerequisite(s): (CHEM 405 with a minimum grade of D- or (CHEM 403 with a minimum grade of D- and (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D-))) and (PHYS 407 with a minimum grade of D- or PHYS 407H with a minimum grade of D- or PHYS 407S with a minimum grade of D-) and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): CHE 705
Grade Mode: Letter Grading

CHBE 706 - Electrochemical Methods: Fundamentals and Applications
Credits: 4
Fundamentals and applications of thermodynamics of electrochemical processes; kinetics of electrochemical reactions; examples in electrochemistry current technology.
Prerequisite(s): CHEM 684 with a minimum grade of D- or CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-.
Equivalent(s): CHE 706
Grade Mode: Letter Grading

CHBE 707 - Chemical Engineering Kinetics
Credits: 3
Use of laboratory data to design commercial reactors. Continuous, batch, plug-flow, and stirred-tank reactors for homogeneous and catalytic multiphase reactions.
Prerequisite(s): MATH 527 with a minimum grade of D- and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): CHE 707
Grade Mode: Letter Grading

CHBE 708 - Chemical Engineering Design
Credits: 4
Introduction to cost engineering. Application of acquired skills to design of chemical processes. Individual major design project required. Safety for industrial processes. Lab.
Attributes: Writing Intensive Course
Equivalent(s): CHE 708
Grade Mode: Letter Grading

CHBE 709 - Fundamentals of Air Pollution and Its Control
Credits: 4
The origin and fate of air pollutants. Fundamentals of atmospheric meteorology, chemistry, and dispersion phenomena. Control of air pollutants and the related equipment. Current issues. Lab.
Prerequisite(s): MATH 527 with a minimum grade of D- and (CHBE 502 with a minimum grade of D or CHE 502 with a minimum grade of D-).
Equivalent(s): CHE 709
Grade Mode: Letter Grading

CHBE 712 - Introduction to Nuclear Engineering
Credits: 4
Development of nuclear reactors; binding-energy; radioactivity; elements of nuclear reactor theory; engineering problems of heat transfer, fluid flow, materials selection, and shielding; environmental impacts.
Prerequisite(s): MATH 527 with a minimum grade of D- and (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-) and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): CHE 712
Grade Mode: Letter Grading

CHBE 713 - Chemical Engineering Laboratory II
Credits: 3
Selected experiments in mass transfer, stagewise operations, thermodynamics, and kinetics.
Attributes: Writing Intensive Course
Prerequisite(s): (CHBE 703 (may be taken concurrently) with a minimum grade of D- or CHE 703 with a minimum grade of D-) and (CHBE 707 (may be taken concurrently) with a minimum grade of D- or CHE 707 with a minimum grade of D-).
Equivalent(s): CHE 713
Grade Mode: Letter Grading

CHBE 714 - Chemical Sensors
Credits: 4
Interdisciplinary approach using thermodynamic, physical and surface chemistry, kinetic, electrochemical, and optical principles to analyze and design chemical sensors. Topics will include selectivity and sensitivity pf sensors, biosensors, electrochemical sensors, mass sensors, optical sensors, and multivariate sensors. Lab.
Prerequisite(s): MATH 527 with a minimum grade of D- and (CHEM 405 with a minimum grade of D- or (CHEM 403 with a minimum grade of D- and (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D-))) and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): CHE 714
Grade Mode: Letter Grading

CHBE 722 - Introduction to Microfluidics
Credits: 4
Fundamentals and applications of microfluidics; scaling laws; microfabrication technology; hydrodynamics and electrodynamics; interfacial phenomena; capillary effects and diffusion; microvalves; micropumps; lab-on-a-chip systems; biochips.
Prerequisite(s): CHBE 601 (may be taken concurrently) with a minimum grade of D- or CHE 601 with a minimum grade of D-.
Equivalent(s): CHE 722
Grade Mode: Letter Grading

CHBE 725 - Cell Phenotyping and Tissue Engineering Laboratory
Credits: 4
Introduction to culture and phenotyping of mammalian cells (cell line models), with applications to bioengineering and biomedical sciences. Skills, techniques, and knowledge covered include sterile technique, cell culture, cell line models, cell proliferation, cell survival, cell migration, cell adhesion, and drug response. Inquiry-based team projects investigate cell proliferation, cell death, transfection, flow cytometry, 3D scaffolds, or cell imaging.
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D- and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): BENG 725
Grade Mode: Letter Grading

CHBE 735 - Interfacial Engineering and Nanotechnology
Credits: 4
Fundamentals of interfacial phenomena and nanotechnology and applications in chemical engineering and bioengineering. Topics will include thermodynamics, surface forces, surface tension, adhesion and surface chemistry and characterizations, colloidal stability in paint, thin film technologies, self-assembly of micelles and lipid bilayers, nanoparticles for drug delivery, adsorption in biomaterials, and crystallization. Lab.
Prerequisite(s): (CHEM 405 with a minimum grade of D- or (CHEM 403 with a minimum grade of D- and (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D-))) and (PHYS 407 with a minimum grade of D- or PHYS 407H with a minimum grade of D- or PHYS 407S with a minimum grade of D-).
Grade Mode: Letter Grading

CHBE 744 - Corrosion
Credits: 4
Fundamentals of corrosion processes in industrial and environmental settings; thermodynamics, kinetics, and mass transport in local corrosion cells; protection by electrochemical, chemical, surface modification or barrier methods; instrumental methods in corrosion science. Lab.
Prerequisite(s): CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-.
Equivalent(s): CHE 744
Grade Mode: Letter Grading

CHBE 752 - Process Dynamics and Control
Credits: 4
Dynamic behavior of chemical engineering processes described by differential equations; feedback control concepts and techniques; stability analysis. Lab.
Prerequisite(s): MATH 527 with a minimum grade of D- and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): CHE 752
Grade Mode: Letter Grading

CHBE 755 - Computational Molecular Bioengineering
Credits: 4
Introduction to fundamental concepts in bioengineering with primary emphasis on understanding details of biomolecular structures integrated with molecular modeling, simulation, and visualization techniques. The course will introduce structural details of various biomolecules (proteins, nucleic-acids, sugars, and lipids), followed by concepts in thermodynamics and physical chemistry (such as intermolecular forces, energy, entropy, chemical potential, and Boltzmann's distribution), the applications of which will be discussed in the context of drug-receptor interactions, molecular recognition, biomolecular folding, enzyme catalysis, allosteric communication, diffusion, and transport. The laboratory will include training and learning about advanced simulation and visualization software engines. Preference will be given to bioengineering majors.
Prerequisite(s): CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-.
Equivalent(s): BENG 755
Grade Mode: Letter Grading

CHBE 761 - Biochemical Engineering
Credits: 4
Immobilized enzyme technology, microbial biomass production, transport phenomena in microbial systems, biological reactor design, process instrumentation and control, applications in separation and purification processes. Lab.
Prerequisite(s): MATH 527 with a minimum grade of D- and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): CHE 761
Grade Mode: Letter Grading

CHBE 762 - Biomedical Engineering
Credits: 4
Overview of the biomedical engineering through topical studies such as drug delivery and sensors. Discussion of modern engineering methods through primary research sources. Differential equations and statistics required prior to taking this course.
Attributes: Writing Intensive Course
Prerequisite(s): MATH 527 with a minimum grade of D- and (MATH 644 (may be taken concurrently) with a minimum grade of D- or MATH 740 (may be taken concurrently) with a minimum grade of D-) and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): BENG 762, CHE 762
Grade Mode: Letter Grading

CHBE 763 - Bioengineering Design I
Credits: 2
Bioengineering design course will cover safety, regulations and ethics for development of bioengineering devices and processes. Topics include product design, benchmarks, design team functioning, marketing and finances. Students will also learn about current Good Manufacturing Practices, process validation and intellectual property considerations. Students will produce the following documents during the course: preliminary design, materials and supplies list, project schedule and budget, innovation map, FDA approval plan.
Attributes: Writing Intensive Course
Equivalent(s): BENG 763
Grade Mode: Letter Grading

CHBE 764 - Bioengineering Design II
Credits: 4
Team based laboratory course focuses on developing the project planned in CHBE 763. Major report is due at mid-semester after first prototype is completed. A second report is due at the end of the semester to indicate improvements on initial design.
Attributes: Writing Intensive Course
Equivalent(s): BENG 764
Grade Mode: Letter Grading

CHBE 766 - Biomaterials
Credits: 4
Fundamental principles of biology and material science, along with latest topics in biomaterials research. Topics include cell biology, wound healing, host response to foreign materials, polymers, hydrogels, diffusion and methods of material characterization. Specific medical applications of biomaterials such as orthopedic and dental implants, heart valves, artificial blood vessels, cochlear and ophthalmic implants and tissue engineering. Laboratory. Students are expected to have some background in chemistry, mathematics, and high school biology.
Prerequisite(s): (CHEM 545 (may be taken concurrently) with a minimum grade of D- or CHEM 651 (may be taken concurrently) with a minimum grade of D-) and (PHYS 407 with a minimum grade of D- or PHYS 407H with a minimum grade of D- or PHYS 407S with a minimum grade of D-) and (CHBE 502 with a minimum grade of D- or CHE 502 with a minimum grade of D-).
Equivalent(s): BENG 766, CHE 766
Grade Mode: Letter Grading

Chemistry (CHEM)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CHEM 400 - Freshman Seminar
Credits: 1
An introduction to the chemistry profession. Talks and workshops on the career of a chemist in academia, industry, medicine, law, teaching and government. Required for chemistry majors.
Repeat Rule: May be repeated for a maximum of 2 credits.
Grade Mode: Credit/Fail Grading

CHEM 403 - General Chemistry I
Credits: 0 or 4
Fundamental laws and concepts applied to nonmetals, metals, and their compounds. For students who plan to take further chemistry courses. Previous chemistry recommended. Knowledge of algebra, exponentials, and logarithms required. Lab. Cannot be taken for credit if credit received for CHEM 405. Required for chemistry majors.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Equivalent(s): CHEM 405
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 404 - General Chemistry II
Credits: 0 or 4
Fundamental laws and concepts applied to nonmetals, metals, and their compounds. For students who plan to take further chemistry courses. Previous chemistry recommended. Knowledge of algebra, exponentials, and logarithms required. Required for chemistry majors. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Prerequisite(s): CHEM 403 with a minimum grade of D-.
Equivalent(s): CHEM 404H, CHEM 405, CHEM 415, CHEM 416
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 404H - Honors/General Chemistry II
Credits: 0 or 4
Fundamental laws and concepts applied to nonmetals, metals, and their compounds. For students who plan to take further chemistry courses. Previous chemistry recommended. Knowledge of algebra, exponentials, and logarithms required. Required for chemistry majors. Lab. Honors course is designed for students who have enrolled in the honors degree program. Lab. Cannot be taken for credit if credit received for CHEM 402.
Attributes: Discovery Lab Course; Honors course; Physical Science(Discovery)
Prerequisite(s): CHEM 403 with a minimum grade of D-.
Equivalent(s): CHEM 404, CHEM 405, CHEM 415, CHEM 416
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 405 - Chemical Principles for Engineers
Credits: 0 or 4
Basic principles; atomic structure, bonding, equilibria, and thermodynamics. One year of high school chemistry, algebra, and knowledge of logarithms. Cannot be taken for credit if credit received for CHEM 403 and CHEM 404. Required for chemical engineering, mechanical engineering, electrical and computer engineering, environmental engineering: industrial majors. Not applicable for credit for majors in chemistry or biochemistry.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Equivalent(s): CHEM 403, CHEM 404, CHEM 404H, CHEM 413, CHEM 414
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 408 - Green Goggles: Introduction to Green Chemistry
Credits: 4
In this course, we investigate the principles and practice of Green Chemistry as they connect to real world examples. Green Chemistry is the field of science that uses a principle-based approach to design chemical reactions and processes to make them more sustainable. In exploring green chemistry, many of the fundamental concepts of a general chemistry course are investigated. Some topics include use of renewable feedstocks, atom economy, catalysis, waste prevention, and design for degradation.
Attributes: Physical Science(Discovery)
Equivalent(s): CHEM 444G
Grade Mode: Letter Grading

CHEM 409 - Chemistry and Society
Credits: 4
Elementary survey of chemistry; integrates principles and applications. For students who do not intend to take any other chemistry courses and those interested in satisfying a general education science requirement. Not a prerequisite for any other chemistry courses. (Not offered every year.) Chemistry majors are excluded from taking this course.
Attributes: Physical Science(Discovery); Inquiry (Discovery)
Grade Mode: Letter Grading

CHEM 411 - Introductory Chemistry for Life Sciences
Credits: 0 or 4
Fundamental and pragmatic aspects of chemistry, particularly as foundation for nutritional biochemistry. Includes basics of bonding, acid/base behavior, reaction energy, intermolecular forces, stoichiometry, and equilibrium. High school chemistry not required. This course is not a replacement to CHEM 403 and is not an acceptable pre-requisite for CHEM 404.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 413 - General Chemistry Lecture I
Credits: 3
Fundamental laws and concepts applied to nonmetals, metals, and their compounds. For students who plan to take further chemistry courses. Previous chemistry recommended. Knowledge of algebra, exponentials, and logarithms required. Not offered every summer. Cannot be taken for credit if credit received for CHEM 401, CHEM 403, CHEM 405, or CHEM 409.
Equivalent(s): CHEM 403, CHEM 405
Grade Mode: Letter Grading

CHEM 415 - General Chemistry Lecture II
Credits: 3
Fundamental laws and concepts applied to nonmetals, metals, and their compounds. For students who plan to take further chemistry courses. Previous chemistry recommended. Knowledge of algebra, exponentials, and logarithms required. Cannot be taken for credit if credit received for CHEM 402 or CHEM 404.
Prerequisite(s): (CHEM 403 with a minimum grade of D- or CHEM 413 with a minimum grade of D-).
Equivalent(s): CHEM 404, CHEM 404H
Grade Mode: Letter Grading

CHEM 416 - General Chemistry Lab II
Credits: 1
Lab application of fundamental laws and concepts applied to nonmetals, metals and their compounds. Previous general chemistry lecture required. Special permission. Not offered every summer. Cannot be taken for credit if credit received for CHEM 402 or CHEM 404. Not open to Chemistry majors.
Prerequisite(s): (CHEM 403 with a minimum grade of D- or CHEM 414 with a minimum grade of D-).
Equivalent(s): CHEM 404, CHEM 404H
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 501 - Peer-led Team Learning in Chemistry
Credits: 2
Initial experience as peer instructional leader. Practical application of theories of cognition, group dynamics, learning, and motivation to helping other students learn chemistry in general chemistry. Requires one weekly meeting with students.
Prerequisite(s): (CHEM 403 with a minimum grade of D- or CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D-).
Grade Mode: Letter Grading

CHEM 502 - Advanced Peer-led Team Leadership in Chemistry
Credits: 1
Development and assessment of leadership skills. Practical application of theories of cognition, group dynamics, learning, and motivation to helping other students learn chemistry in general chemistry. Requires one weekly meeting with students.
Prerequisite(s): CHEM 501 with a minimum grade of D- or INCO 501 with a minimum grade of D-.
Grade Mode: Letter Grading

CHEM 503 - Mentoring for Peer Team Learning
Credits: 1
Experienced leaders mentor a new leader in implementation of PLTL model, including initial co-leading and observational formative assessment. Mentors report on mentee development, visit other experienced leaders, and provide a final evaluation. Mentors lead their own weekly group and assist part-time in the PLTL leader meetings.
Prerequisite(s): CHEM 501 with a minimum grade of D-.
Grade Mode: Letter Grading

CHEM 517 - Introduction to Chemical Measurement Science
Credits: 3
Application of chemical principles, particularly equilibrium, to quantitative measurement of chemical substances. Measurement design and control, accuracy and precision, calibration of instruments, sample representativeness and integrity.
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Grade Mode: Letter Grading

CHEM 518 - Practical Chemical Measurement Techniques and Instrumentation
Credits: 2
Development of practical skills for quantitative measurement of chemical substances, proper use of laboratory tools and instruments. Introduction to analytical separations, ion-selective electrodes, spectrophotometry.
Co-requisite: CHEM 517
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 545 - Organic Chemistry
Credits: 3
Introductory study of carbon compounds for those who desire a brief terminal course. This course is a one semester course only. CHEM 545 and 546 are not applicable for pre-med, pre-vet, pharmacological majors or minors requiring a year long course of organic. CHEM 545 and CHEM 546 cannot be used to meet semester 1 of the year long-organic course (CHEM 547 or CHEM 651). CHEM 545 and CHEM 546L are co-requisites and must be taken together.
Co-requisite: CHEM 546
Prerequisite(s): CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D- or CHEM 405 with a minimum grade of D-.
Grade Mode: Letter Grading

CHEM 546 - Organic Chemistry Laboratory
Credits: 2
Introductory study of carbon compounds for those who desire a brief terminal course. Lab.
Co-requisite: CHEM 545
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Grade Mode: Letter Grading

CHEM 547 - Organic Chemistry I
Credits: 3
Principal classes of organic compounds, aliphatic and aromatic; class reactions and structural theory. Intended primarily for chemistry and biochemistry majors. Students receiving credit for CHEM 547-548 may not receive credit for either CHEM 545 or CHEM 651 and CHEM 652.
Co-requisite: CHEM 549
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Equivalent(s): CHEM 651
Grade Mode: Letter Grading

CHEM 548 - Organic Chemistry II
Credits: 3
Principal classes of organic compounds, aliphatic and aromatic; class reactions and structural theory. Intended primarily for chemistry and biochemistry majors. Students receiving credit for CHEM 547 and CHEM 548 may not receive credit for either CHEM 545 or CHEM 651 and CHEM 652. Only listed majors allowed: Chemistry (BS), Chemistry (BA), Bchmmolcebio, and Biochemistry.
Co-requisite: CHEM 550
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D- or CHEM 405 with a minimum grade of D-) and CHEM 547 with a minimum grade of D-.
Equivalent(s): CHEM 652
Grade Mode: Letter Grading

CHEM 549 - Organic Chemistry Laboratory
Credits: 2
Lab.
Co-requisite: CHEM 547
Equivalent(s): CHEM 546, CHEM 653
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 550 - Organic Chemistry Laboratory
Credits: 2
Organic Chemistry Laboratory.
Co-requisite: CHEM 548
Equivalent(s): CHEM 654
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 574 - Chemistry Across the Periodic Table
Credits: 4
Ninety-eight elements form the building blocks of every substance on Earth-they are elegantly organized into what we now call The Periodic Table. This course will discuss the structure/property/reactivity patterns inherent in The Periodic Table, their origins according to the quantum mechanical model of the atom, and how they are manifest in current research advancements and modern applications of main group element chemistry, transition metal chemistry, and the chemistry of solids and materials.
Attributes: Inquiry (Discovery)
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Grade Mode: Letter Grading

CHEM 576 - Experimental Inorganic Chemistry
Credits: 2
This laboratory course is an introduction to synthetic methods in inorganic chemistry and the study of the elements across the periodic table. This course will emphasize the use of spectroscopic and analytical techniques specifically aimed at characterizing and identifying inorganic compounds, such as multi-nuclear NMR, UV\Vis, IR spectroscopy, X-ray diffraction and mass spectrometry. An introduction to scientific writing will be included.
Prerequisite(s): CHEM 574 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 651 - Organic Chemistry I
Credits: 3
Principal classes of organic compounds, aliphatic and aromatic, class reactions and structural theory. Intended primarily for pre-healing arts, biological science, and health science students. Students receiving credit for CHEM 651 and CHEM 652 may not receive credit for either CHEM 545 or CHEM 547 and CHEM 548.
Co-requisite: CHEM 653
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Equivalent(s): CHEM 547
Grade Mode: Letter Grading

CHEM 652 - Organic Chemistry II
Credits: 3
Principal classes of organic compounds, aliphatic and aromatic, class reactions and structural theory. Intended primarily for pre-healing arts, biological science, and health science students.
Co-requisite: CHEM 654
Prerequisite(s): (CHEM 651 with a minimum grade of D- and (CHEM 653 with a minimum grade of D-.
Equivalent(s): CHEM 548
Grade Mode: Letter Grading

CHEM 652A - Organic Chemistry II
Credits: 3
Principal classes of organic compounds, aliphatic and aromatic, class reactions, and structural theory. Intended primarily for pre-healing arts, biological science, and health science students. Students receiving credit for CHEM 651 and CHEM 652 may not receive credit for either CHEM 545 or CHEM 547 and CHEM 548. This course is for Chemical Engineers only.
Prerequisite(s): CHEM 651 with a minimum grade of D- and CHEM 653 with a minimum grade of D-.
Grade Mode: Letter Grading

CHEM 653 - Organic Chemistry Laboratory
Credits: 2
Lab.
Co-requisite: CHEM 651
Equivalent(s): CHEM 546, CHEM 549
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 654 - Organic Chemistry Laboratory
Credits: 2
Organic Chemistry Laboratory.
Co-requisite: CHEM 652
Equivalent(s): CHEM 550
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 683 - Physical Chemistry I
Credits: 3
Topics may be chosen from: properties of gases, liquids, and solids; thermochemistry, and thermodynamics; chemical equilibria; reaction rates; quantum chemistry and spectroscopy.
Co-requisite: CHEM 685
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D- or CHEM 405 with a minimum grade of D-) and (MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-) and (PHYS 402 (may be taken concurrently) with a minimum grade of D- or PHYS 407 (may be taken concurrently) with a minimum grade of D- or PHYS 407H (may be taken concurrently) with a minimum grade of D- or PHYS 407S (may be taken concurrently) with a minimum grade of D-).
Grade Mode: Letter Grading

CHEM 684 - Physical Chemistry II
Credits: 3
Topics may be chosen from: properties of gases, liquids, and solids; thermochemistry, and thermodynamics; chemical equilibria; reaction rates; quantum chemistry and spectroscopy.
Co-requisite: CHEM 686
Prerequisite(s): CHEM 683 with a minimum grade of D- and (MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-).
Grade Mode: Letter Grading

CHEM 685 - Physical Chemistry Laboratory
Credits: 2
Measurement of thermodynamic properties, chemical kinetics, and methods of determining the structure of matter.
Co-requisite: CHEM 683
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D- or CHEM 405 with a minimum grade of D-) and (MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-) and (PHYS 407 (may be taken concurrently) with a minimum grade of D- or PHYS 407H (may be taken concurrently) with a minimum grade of D- or PHYS 402 (may be taken concurrently) with a minimum grade of D- or PHYS 407S (may be taken concurrently) with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 686 - Physical Chemistry Laboratory
Credits: 2
Measurement of thermodynamic properties, chemical kinetics, and methods of determining the structure of matter.
Co-requisite: CHEM 684
Prerequisite(s): CHEM 683 with a minimum grade of D- and CHEM 685 with a minimum grade of D- and (PHYS 407 (may be taken concurrently) with a minimum grade of D- or PHYS 407H (may be taken concurrently) with a minimum grade of D- or PHYS 402 (may be taken concurrently) with a minimum grade of D- or PHYS 407S (may be taken concurrently) with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 696 - Independent Study
Credits: 1-4
For exceptional students. Individual reading, writing, or laboratory work carried out under the tutelage of a faculty member. May be used to replace specific required courses in chemistry.
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Grade Mode: Letter Grading

CHEM 708 - Spectroscopic Investigations of Organic Molecules
Credits: 3
Identification and structural analysis of chemical compounds by selected instrumental methods. Typical topics include proton and carbon-13 NMR spectroscopy, IR and UV spectroscopy, and mass spectrometry.
Grade Mode: Letter Grading

CHEM 740 - Chemical Biology
Credits: 3
How does the COVID vaccine work? What is an antibody conjugate? What is bioconjugation? How do we see mRNA in living cells? How do we evolve enzymes? Chemical Biology is the interdisciplinary study of the chemicals and chemical reactions involved to probe, manipulate, and control biological systems in vitro and in vivo. This course is designed for biologists, chemists, and engineers who want to understand cutting edge and relevant research techniques used in modern medicine.
Attributes: Biological Science(Discovery)
Prerequisite(s): (CHEM 547 with a minimum grade of D- and CHEM 548 with a minimum grade of D-) or (CHEM 651 with a minimum grade of D- and CHEM 652 with a minimum grade of D-).
Grade Mode: Letter Grading

CHEM 741 - Chemical Biology Laboratory
Credits: 4
In this course we will perform 3 month-long experiments that will demonstrate the three major pillars of chemical biology: Perceive, profile, and perturb. This will demonstrate how chemical entities can be used to further understand biological systems and organisms.
Prerequisite(s): CHEM 740 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 755 - Advanced Organic Chemistry
Credits: 3
Methods of synthesis and determination of structure, including stereochemistry of complex organic compounds.
Prerequisite(s): (CHEM 548 with a minimum grade of D- or CHEM 652 with a minimum grade of D-).
Grade Mode: Letter Grading

CHEM 762 - Advanced Chemical Analysis Instrumentation
Credits: 3
Theory, instrumentation, and application of methods to qualitative identification and quantitative measurement of trace chemical substances including environmental pollutants. Includes methods of such as atomic spectroscopy, gas and liquid chromatography, IR and UV-VIS spectrophotometry, electrochemistry, fluorescence, mass spectrometry, X-ray techniques.
Co-requisite: CHEM 763
Prerequisite(s): CHEM 517 with a minimum grade of D- and CHEM 518 with a minimum grade of D-.
Grade Mode: Letter Grading

CHEM 763 - Advanced Chemical Instrumentation Laboratory
Credits: 2 or 3
Hands-on experience with modern instrumentation for trace chemical analysis described in CHEM 762. Performance capabilities and limitations, care, and safety.
Co-requisite: CHEM 762
Prerequisite(s): CHEM 518 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 774 - Inorganic Chemistry
Credits: 3
Basic theoretical concepts and their applications to inorganic reactions and compounds.
Prerequisite(s): (CHEM 548 with a minimum grade of D- or CHEM 652 with a minimum grade of D-).
Grade Mode: Letter Grading

CHEM 777 - Advanced Synthesis and Characterization
Credits: 0 or 3
This is an advanced laboratory course involving the synthesis and characterization of organic and inorganic compounds. Students will leave this course with sufficient proficiency to reproduce synthetic procedures and prepare compounds from the chemical literature.
Prerequisite(s): CHEM 550 with a minimum grade of D- and CHEM 576 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

CHEM 795 - Special Topics
Credits: 2-4
New or specialized topics not covered in regular course offerings.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

CHEM 798 - Senior Seminar
Credits: 1
Student reports on topics of interest.
Attributes: Writing Intensive Course
Prerequisite(s): (CHEM 548 with a minimum grade of D- or CHEM 652 with a minimum grade of D-) and CHEM 684 with a minimum grade of D-.
Equivalent(s): CHEM 698
Grade Mode: Credit/Fail Grading

CHEM 799 - Senior Thesis
Credits: 4
Yearlong investigation in a selected topic, with background and experimental investigation. For chemistry majors who have completed CHEM 548, CHEM 694, and CHEM 762. Required for B.S. majors. Strongly recommended for B.A. chemistry majors. 2.50 average and approval of department chairperson. Lab. Two semesters of 4 credits each are required.
Attributes: Writing Intensive Course
Prerequisite(s): CHEM 548 with a minimum grade of D- and CHEM 684 with a minimum grade of D-.
Repeat Rule: May be repeated up to 1 time.
Equivalent(s): CHEM 699
Grade Mode: Letter Grading

Chinese (CHIN)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CHIN 401 - Elementary Chinese I
Credits: 4
Designed for students without previous knowledge of Chinese. Focuses on developing communicative proficiency in listening, speaking, reading, and writing. Students will learn basic vocabulary and sentence structures for use in essential everyday situations, as well as aspects of Chinese culture and society related to the course materials.
Grade Mode: Letter Grading

CHIN 402 - Elementary Chinese II
Credits: 4
Focuses on developing communicative proficiency in listening, speaking, reading, and writing. Students will learn basic vocabulary and sentence structures for use in essential everyday situations, as well as aspects of Chinese culture and society related to the course materials. CHIN 401 and CHIN 402 taken together satisfies the foreign language requirement. Cannot be taken separately without permission of the instructor.
Attributes: Foreign Language Requirement
Prerequisite(s): CHIN 401 with a minimum grade of D-.
Grade Mode: Letter Grading

CHIN 425 - Introduction to Chinese Culture
Credits: 4
Conducted in English. This course offers a critical introduction to Chinese culture, including its three philosophical foundations (Confucianism, Daoism, Buddhism), various branches of cultural production (e.g. language, food, painting, military strategy), and modern transformation. Explores the intellectual, literary, artistic, and socio-political issues that have shaped Chinese culture for the past two and a half millennia. Students can expect to gain in-depth knowledge of some major elements that define the Chinese tradition.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

CHIN 503 - Intermediate Chinese I
Credits: 4
Focuses on developing communicative proficiency in listening, speaking, reading, and writing. Students will strengthen the language skills learned at previous levels, and acquire more advanced vocabulary and sentence patterns, as well as related cultural knowledge, to deal with more complicated everyday situations.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Prerequisite(s): CHIN 402 with a minimum grade of D-.
Grade Mode: Letter Grading

CHIN 504 - Intermediate Chinese II
Credits: 4
Focuses on developing communicative proficiency in listening, speaking, reading, and writing. Students will strengthen the language skills learned at previous levels, and acquire more advanced vocabulary and sentence patterns, as well as related cultural knowledge, to deal with more complicated everyday situations. Cannot be taken separately without permission of the instructor.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Prerequisite(s): CHIN 503 with a minimum grade of D-.
Grade Mode: Letter Grading

CHIN 631 - Advanced Chinese Conversation and Composition I
Credits: 4
Focuses on developing communicative proficiency in listening, speaking, reading, and writing at an advanced level. While students continue to consolidate their speaking and listening skills, more emphasis will be placed on reading and writing skills.
Attributes: Foreign Language Requirement
Prerequisite(s): CHIN 504 with a minimum grade of D-.
Grade Mode: Letter Grading

CHIN 632 - Advanced Chinese Conversation and Composition II
Credits: 4
Focuses on developing communicative proficiency in listening, speaking, reading, and writing at an advanced level. While students continue to consolidate their speaking and listening skills, more emphasis will be placed on reading and writing skills. Cannot be taken separately without permission of the instructor.
Attributes: Foreign Language Requirement
Prerequisite(s): CHIN 631 with a minimum grade of D-.
Grade Mode: Letter Grading

CHIN 795 - Independent Study
Credits: 1-4
Open to highly qualified juniors and seniors. To be taken only with the permission of department chairperson and of the supervising faculty member or members. Barring duplication of subject, may be repeated for credit.
Repeat Rule: May be repeated up to 4 times.
Grade Mode: Letter Grading

Civil & Environmental Engineering (CEE)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CEE 400 - Introduction to Civil and Environmental Engineering
Credits: 0 or 4
Introduction to the civil and environmental engineering profession, including topics like structural, geotechnical, water resources, materials, transportation, site design, energy infrastructure, climate change, sustainability, natural hazards, solid and hazardous waste management, remediation, water/wastewater treatment, and air pollution. The course provides an overview of the civil and environmental project process, including the creative design process, problem solving, interdisciplinary teamwork, and presentation. Students will learn about engineering ethics, societal impacts of projects, professional licensure, and the triple bottom line along with information about campus resources, the curriculum for the programs, and career opportunities. The course also includes an introduction to relevant computer skills and software, like Excel and will require students to produce professional engineering documents which will include technical writing and calculations.
Attributes: Environment,TechSociety(Disc); Inquiry (Discovery)
Equivalent(s): CIE 402
Grade Mode: Letter Grading

CEE 402 - 2D Computer Aided Design
Credits: 3
This course will serve as an introduction to some of the fundamental principles of building design and land planning. You will prepare plans representative of building construction and land development commonly used in the architectural, engineering, surveying and construction fields. The emphasis will be on the end result: Preparing complete and professional plans. Through this, you will acquire basic skills in designing and plan layout required by these industries. We will approach this material by designing and drafting using computer software (AutoCAD). Another end outcome is that you will gain a certain level of competency with this AutoCAD software, a program used by the majority of the firms in these professions.
Equivalent(s): TECH 564
Grade Mode: Letter Grading

CEE 403 - GIS for Civil and Environmental Engineering
Credits: 3
This course will serve as an introduction to some of the fundamental principles of Geographic Information Systems integral to Civil and Environmental Engineering. Students will develop an understanding of imagery and data acquisition; develop skills in identification, interpretation, and mapping of civil and land features, terrain analysis, and achieve an understanding of map projections; gain experience in GIS software to perform fundamental geoprocessing and mapping techniques.
Grade Mode: Letter Grading

CEE 404 - Surveying and Mapping
Credits: 0 or 4
Principles of land measurements by ground, photogrammetric and satellite methods to model the environment. Application of theory of measurements to perform and adjust engineering survey. Conformal mapping and its application to state plane coordinates. Digital mapping and Geographic Information Systems. Construction and cadastral surveying. Lab.
Prerequisite(s): MATH 425 (may be taken concurrently) with a minimum grade of D- or MATH 425H (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): CIE 505
Grade Mode: Letter Grading

CEE 420 - Environmental Engineering Gateway
Credits: 3
Introduces the profession, the environmental engineer as planner, designer, problem solver, and interdisciplinary team player; and the goals of the environmental engineering curriculum. Lectures by faculty and practitioners. Introduction to computer skills required for environmental engineering. Engineering ethics.
Equivalent(s): ENCV 400, ENE 400
Grade Mode: Letter Grading

CEE 500 - Statics for Civil Engineers
Credits: 3
Introduction to statics with emphasis on civil engineering topics; two and three dimensional force systems; static equilibrium; friction; analysis of trusses and beams; centroids; and moment and shear diagrams for flexural members.
Prerequisite(s): (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-) and (MATH 426 (may be taken concurrently) with a minimum grade of D- or MATH 426H (may be taken concurrently) with a minimum grade of D-).
Equivalent(s): ME 525
Grade Mode: Letter Grading

CEE 501 - Strength of Materials
Credits: 3
Strength of materials with emphasis on civil engineering applications. Virtual work; work and energy relationships; analysis of members subjected to flexure, torsion, and axial loads; stresses and strains; and stability of columns.
Prerequisite(s): (CEE 500 with a minimum grade of D- or ME 525 with a minimum grade of D-) and MATH 426 with a minimum grade of D-.
Equivalent(s): ME 526
Grade Mode: Letter Grading

CEE 502 - Project Engineering
Credits: 3
Techniques for financial analysis, and operation and management of engineering systems, engineering economics, material take-offs, estimating, scheduling, modeling physical systems, and decision-making. CEE major or permission.
Equivalent(s): CIE 533, CIE 633, CIE 733
Grade Mode: Letter Grading

CEE 505 - Introduction to Sustainable Engineering
Credits: 3
This course begins with exploration of the precept that we live in, and must design engineering works for, a world with a finite supply of natural resources and with limited life support capacity. Tools for sustainability engineering are the focus of the course, which includes life cycle analysis and life cycle impact analysis, the metrics and mass and energy flow analyses used in the field of industrial ecology, and environmental management systems.
Grade Mode: Letter Grading

CEE 520 - Environmental Pollution and Protection: A Global Context
Credits: 0 or 4
Introduces environmental science and engineering and the anthropogenic causes of environmental change. Emphasizes the causes, effects, and controls of air, water, and land pollution. The political, ecological, economic, ethical, and engineering aspects of environmental pollution and control are discussed. Field trips.
Attributes: Environment,TechSociety(Disc); Writing Intensive Course
Equivalent(s): BIOL 520, ENCV 520, ENE 520
Grade Mode: Letter Grading

CEE 620 - One Water Engineering
Credits: 4
Application of fundamental concepts on water engineering as a single resource. Students will learn core design principles for integrated physical, chemical, and biological treatment processes combined with planning and system integration for sustainable and equitable drinking water, wastewater, graywater, and stormwater management.
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D-) and CEE 650 with a minimum grade of D- and CEE 520 with a minimum grade of D-.
Equivalent(s): ENCV 645, ENE 645
Grade Mode: Letter Grading

CEE 635 - Engineering Materials
Credits: 0 or 4
Structural properties and applications of the various materials used in civil engineering projects, including steel, cement, mineral aggregates, concrete, timber, and bituminous materials. Microstructure and properties of common metals, plastics, and ceramics. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): CEE 501 with a minimum grade of D- or ME 526 with a minimum grade of D-.
Equivalent(s): CIE 622
Grade Mode: Letter Grading

CEE 650 - Fluid Mechanics
Credits: 0 or 4
Properties of fluids, fluid statics, continuity, momentum and energy equations, resistance to flow, boundary layer theory, flow in open channels and piping systems, dimensional analysis, similitude, drag, and lift. Laboratory exercises on measurement of fluid properties, energy principles, flow resistance, discharge measurements, momentum, hydropower, groundwater flow, and settling of spheres. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-.
Equivalent(s): CIE 642
Grade Mode: Letter Grading

CEE 665 - Soil Mechanics
Credits: 0 or 4
Soil classification and physical properties. Permeability, compressibility, consolidation, and shearing resistance are related to the behavior of soils subjected to various loading conditions. Lab.
Prerequisite(s): CEE 635 with a minimum grade of D- and CEE 650 with a minimum grade of D-.
Equivalent(s): CIE 665
Grade Mode: Letter Grading

CEE 680 - Classical Structural Analysis
Credits: 3
Analytical stress and deflection analysis of determinate and indeterminate structures under static and moving loads by classical methods.
Prerequisite(s): CEE 501 with a minimum grade of D-.
Equivalent(s): CIE 681
Grade Mode: Letter Grading

CEE 700 - Building Information Modeling
Credits: 3
Building Information Modeling (BMI) is the process of generating and managing project data during its life cycle by integrating 3D multidisciplinary drawings with dynamic scheduling and visualization. BIM provides a digital representation of project data to facilitate the exchange of information beyond the standard two dimensional plan set. This course introduces students to the fundamentals of model creation, scheduling, material take-offs, visualizations, and animations that improve the communication of information to potential clients.
Prerequisite(s): CEE 402 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): CIE 780
Grade Mode: Letter Grading

CEE 703 - Site Design and Project Development
Credits: 3
Provides an in-depth introduction to the various design activities undertaken for Land Development (Site Design) projects. Investigates aspects of site design: parking, grading, drainage, traffic, due diligence, permitting, cost estimating, and financing. Introduces concepts of Project Development process including project management, financing, delivery methods, design development, client relations, and construction administration. Course format will include lectures, guest presenters, and site visits. Grading based upon writing examination, assignments, group project, and professional development activities.
Prerequisite(s): CEE 502 with a minimum grade of D-.
Equivalent(s): CIE 753
Grade Mode: Letter Grading

CEE 706 - Environmental Life Cycle Assessment
Credits: 3
This course teaches knowledge and hands-on-skills in conducting environmental life cycle assessment (LCA), which is a widely used technique by industries, academics, and governments. Students will learn to use popular LCA software (e.g. SimaPro), apply proper LCA techniques, critically analyze LCA results, and provide client-oriented suggestions during this course. Class time is primarily devoted to a combination of lectures and computer labs.
Grade Mode: Letter Grading

CEE 707 - Systems thinking and modeling
Credits: 3
This course teaches knowledge and hands-on skills in computational systems modeling, which is one of the most commonly used tools in analyzing the mechanisms, tradeoffs, and feedbacks in environmental, social, and economic procedures and systems. Students will also be trained with the ability of systems thinking during this course. Class time is primarily devoted to a combination of lectures and computer labs.
Grade Mode: Letter Grading

CEE 719 - Green Building Design
Credits: 3
This course gives an overview of green designs and sustainable practices in building construction. We will cover technical topics and requirements of a nationally recognized rating system (LEED), with a specific focus on Green Building Design and Construction. Students are introduced to basic building designs and systems related to sustainability. Additionally, they learn about green design topics such as site plans, water and energy efficiency, material and resources usage, environmental quality and renewable energy source. As an outcome of the course, students are able to assess and incorporate green technologies and designs into building projects.
Equivalent(s): CIE 781
Grade Mode: Letter Grading

CEE 720 - Waste Management and Site Remediation
Credits: 3
The course has two main areas of focus: (1) solid and hazardous waste management, including the key regulations and engineering approaches, such as landfills, waste-to-energy combustion, composting, and material recovery facilities; and (2) contaminated site remediation, including the key regulations, site characterization, risk-based decision making, transport and fate of contaminants, and an introduction to remediation technologies.
Equivalent(s): ENCV 742, ENE 742
Grade Mode: Letter Grading

CEE 721 - Environmental Sampling and Analysis
Credits: 4
Theory of analytical and sampling techniques used in environmental engineering. Topics include potentiometry, spectroscopy, chromatography, automated analysis, quality control, sampling design, and collection methods. Methods discussed in lecture are demonstrated in labs. Lab.
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Equivalent(s): CEE 721W, ENE 743, ENE 743W
Grade Mode: Letter Grading

CEE 722 - Introduction to Marine Pollution and Control
Credits: 4
Introduces the sources, effects, and control of pollutants in the marine environment. Dynamic and kinetic modeling; ocean disposal of on-shore wastes, shipboard wastes, solid wastes, dredge spoils, and radioactive wastes; and oil spills.
Prerequisite(s): CEE 620 with a minimum grade of D-.
Equivalent(s): ENCV 747, ENE 747
Grade Mode: Letter Grading

CEE 723 - Environmental Engineering Chemistry
Credits: 4
Chemical equilibrium principles of thermodynamics, acids/bases, precipitation/dissolution, oxidation/reduction, and complexation applied to surface water, groundwater, water and wastewater treatment. Applications to legacy and emerging organic and inorganic contaminants.
Prerequisite(s): CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D-.
Equivalent(s): ENCV 749, ENE 749
Grade Mode: Letter Grading

CEE 724 - Environmental Engineering Microbiology
Credits: 4
Concepts of environmental engineering microbiology. Topics include taxonomy of species important in environmental engineering processes; microbial metabolism, interaction, and growth kinetics in environmental treatment processes; biogeochemical cycling in water; and effects of environmental parameters on environmental engineering microbial processes. Laboratories focus on microbiological methods and laboratory-scale biological treatment experiments. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): CEE 520 with a minimum grade of D- and CEE 650 with a minimum grade of D-.
Equivalent(s): ENCV 656, ENE 656, ENE 756
Grade Mode: Letter Grading

CEE 729 - Sources, Control, and Stewardship of Air Pollution
Credits: 4
Sources and fate of air pollutants from natural and engineered systems. Fundamentals of pollutant chemistry, atmospheric dispersion, and engineering controls. Includes regulatory policy, environmental, and social justice issues.
Grade Mode: Letter Grading

CEE 730 - Public Health Engineering for Rural and Developing Communities
Credits: 3
The application of environmental health engineering and sanitation principles in disease prevention and control are discussed. Special emphasis is given to areas of the world where communicable and related diseases have not yet been brought under control and to what can happen in more advanced countries when basic sanitary safeguards are relaxed. The following topics are covered: water-related diseases to include their transmission and control; safe water development, treatment, distribution and storage; and on-site wastewater treatment and disposal system.
Equivalent(s): ENCV 740, ENE 740
Grade Mode: Letter Grading

CEE 731 - Advanced Water Treatment Processes
Credits: 4
The advanced design of physical, chemical, and biological treatment processes for water and wastewater systems. Emphasis on both conventional and innovative treatment processes, including technologies for emerging issues and contaminants.
Prerequisite(s): CEE 723 with a minimum grade of D- and CEE 620 with a minimum grade of D-.
Grade Mode: Letter Grading

CEE 732 - Solid Waste Facility and Remediation System Design
Credits: 4
Focuses on the design of solid waste facilities, including landfills, waste-to-energy facilities and materials recovery facilities, and the design of remediation systems including soil vapor extraction and thermal treatment. Landfill design will include the basic design principles of the liner, leachate collection system, and landfill gas management. Remediation system design will focus on cleanup technologies implemented at contaminated sites.
Prerequisite(s): CEE 720 with a minimum grade of D-.
Equivalent(s): ENCV 748, ENE 748
Grade Mode: Letter Grading

CEE 733 - Public Infrastructure Asset Management
Credits: 4
This course is designed to provide a thorough examination of the engineering field of Public Infrastructure Asset Management (PIAM). The course will enable the student to design a PIAM system. The course will touch upon all types of public infrastructure (buildings, roads, bridges, airports, stadiums, water, wastewater and stormwater) with a particular focus on road and water infrastructure for the semester project. Students will build upon their engineering economics and project engineering skills and use simple PIAM software. Students will also be exposed to the growing number of PIAM software systems being used today. Practice leaders from the industry will be invited as guest speakers several times during the semester. Sustainability considerations will be incorporated into the PIAM decisions made with a focus on the "triple bottom line" or the Societal, Environmental and Economic aspects of management decisions. The format of the course will be a modified team-based learning experience providing practice in processing of technical lecture material, personal performance evaluation (quizzes) and team-based performance evaluations (TBLs or PSets). A term project designing a PIAM system will be performed in groups and a final written report and oral presentation on the real-world project will provide a major part of this design course grade.
Prerequisite(s): CEE 502 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): ENE 739
Grade Mode: Letter Grading

CEE 734 - Sustainable Biosolids Engineering
Credits: 3
Overview of traditional and emerging approaches to biosolids management strategies for municipal wastewater, agriculture, and industrial processes leading up to the current regulatory framework in New England. Mass, contaminant, energy, policy, and economic concepts of dewatering/drying, composting, digestion, and thermal treatment technologies. Biosolids generation calculations will be performed with BioWIN software. Involves lectures, guest speakers, laboratory/modeling activities, and field tours. Satisfies Design requirement in BSEnvE program.
Prerequisite(s): CEE 620 with a minimum grade of D-.
Grade Mode: Letter Grading

CEE 735 - Properties and Production of Concrete
Credits: 3
Basic properties of hydraulic cements and mineral aggregates, and their interactions in the properties of plastic and hardened concrete; modifications through admixtures; production handling and placement problems; specifications; quality control and acceptance testing; lightweight, heavyweight, and other special concretes.
Prerequisite(s): CEE 635 with a minimum grade of D-.
Equivalent(s): CIE 722
Grade Mode: Letter Grading

CEE 736 - Asphalt Mixtures and Construction
Credits: 3
Specification of asphalt cements, aggregates and proportioning of mixture constituents for paving applications. Asphalt mixture design methods, production, construction, and quality control are discussed. Current new material production and construction technologies are introduced.
Prerequisite(s): CEE 635 with a minimum grade of D-.
Equivalent(s): CIE 723
Grade Mode: Letter Grading

CEE 737 - Pavement Rehabilitation, Maintenance, and Management
Credits: 3
This course covers the technical and financial strategies to extend the life of highway and airfield pavements. The course topics will include: Assessment of pavement functional and structural condition, suitability of pavement maintenance and repair techniques, use of pavement preservation processes, and application of asset management to extend the life of pavement infrastructure.
Prerequisite(s): CEE 635 with a minimum grade of D-.
Grade Mode: Letter Grading

CEE 749 - Pavement Design and Analysis
Credits: 4
Introduction to flexible and rigid pavement design and analysis for highways and airports. Examines design inputs, materials, analysis methods, design tools, and maintenance treatments. Students will conduct a pavement design project. This course satisfies a senior level materials principal design elective in the CEE department.
Prerequisite(s): CEE 635 with a minimum grade of D- and CEE 665 with a minimum grade of D-.
Equivalent(s): CIE 721
Grade Mode: Letter Grading

CEE 751 - Open Channel Flow
Credits: 3
Energy and momentum principles in open channel flow; flow resistance; channel controls and transitions; unsteady flow concepts and dam failure studies. Modeling with HEC programs.
Prerequisite(s): CEE 650 with a minimum grade of D-.
Equivalent(s): CIE 741
Grade Mode: Letter Grading

CEE 753 - Snow Hydrology
Credits: 3
Snow is a significant component of the hydrologic cycle in high latitude and high elevation environments. It is also a part of engineering design and practice that is frequently overlooked. In this course, we will examine spatial controls on snow accumulation and the dynamics of snowmelt processes through readings in snow hydrology, field assays of snow distribution, and analytical exercises. Of particular interest will be the role of snow in water resource engineering.
Prerequisite(s): CEE 650 with a minimum grade of D- and (MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-).
Grade Mode: Letter Grading

CEE 754 - Engineering Hydrology
Credits: 3
Hydrologic cycle, probability theory related to hydrology and the design of water resources structures, water law, flood discharge prediction, hydrograph development, hydraulic and hydrologic river routing, reservoir routing, theory of storage, reservoir operations, hydropower development, modeling of watershed hydrology with program HEC-1, HEC-HMS, multipurpose projects.
Equivalent(s): CIE 745
Grade Mode: Letter Grading

CEE 755 - Design of Pressurized Water Transmission Systems
Credits: 4
Theory developed for individual components to large complex systems. Analysis and designs of components and systems. Topics include: steady and unsteady closed conduit flow, valves and meters, pump requirements, pump selection, system planning and layout, water hammer, and system operation and maintenance. Pressure system modeling with program EPANET.
Prerequisite(s): CEE 650 with a minimum grade of D-.
Equivalent(s): CIE 755
Grade Mode: Letter Grading

CEE 758 - Stormwater Management Designs
Credits: 3
Historic review of stormwater management leading up to the current regulatory framework. Overview of stormwater management strategies, strategy selection, and the targeting of specific contaminants, contaminant removal efficiencies, construction and site selection, and system maintenance. Hydrologic concepts including watershed and storm characteristics, design hydrology (peak flows, storm and treatment volumes), hydrograph routing, and critical review of hydrology and drainage reports. Design and sizing of treatment systems including: conventional, BMPs, low impact development, and manufactured devices. Rainfall runoff calculations with US SCS TR55 model.
Prerequisite(s): CEE 650 with a minimum grade of D-.
Equivalent(s): CIE 758
Grade Mode: Letter Grading

CEE 759 - Stream Restoration
Credits: 4
The assessment, planning, design, engineering, and monitoring of stream and watershed practices intended to protect and restore the quality and quantity of flowing surface waters and stream corridors. Lecture material covers hydrology, geomorphology, and ecosystems, with the intent of understanding the variables associated with stream systems and their interplay. Students measure field variables and then are challenged with actual designs. Examples of stream restoration issues include: in-stream flow, dam removal, induced recharge, improvements to fish habitat, and channel stabilization.
Prerequisite(s): CEE 650 with a minimum grade of D-.
Equivalent(s): CIE 759
Grade Mode: Letter Grading

CEE 765 - Engineering Behavior of Soils
Credits: 4
Review of stress and strain in soil. Introduction to continuum mechanics. Development of engineering soil properties. Application of soil mechanics to shear strength and stress-strain behaviors of soils. Failure states and residual strength. Application of stress paths in engineering problems. Unstaturated soil mechanics. Laboratory exercises using direct shear test, triaxial test, and soil-water retention measurements.
Equivalent(s): CIE 767
Grade Mode: Letter Grading

CEE 766 - Introduction to Geotechnical Earthquake Engineering
Credits: 3
Overviews earthquake source mechanisms; magnitude and intensity; seismicity of the United States. Dynamics of simple structures; response spectra. Selection of design parameters; source, magnitude, input records. Measurement of dynamic characteristics of soils; site response, liquefaction, and ground deformation.
Prerequisite(s): CEE 778 with a minimum grade of D-.
Equivalent(s): CIE 762
Grade Mode: Letter Grading

CEE 768 - Geo-Environmental Engineering
Credits: 3
Soil composition and structure; contaminant fate and transport; containment design including landfills, geo-synthetics for liners and covers, and leachate collection systems; vertical cutoff walls and slope stability analyses; geo-environmental site characterization and investigation using geotechnical and geophysical methods; ground water, soil and gas monitoring and sampling; remediation including in situ and ex situ techniques and treatment methods.
Equivalent(s): CIE 766
Grade Mode: Letter Grading

CEE 769 - Marine Geotechnics
Credits: 3
This course is designed to introduce students to fundamental principles and techniques commonly used in the field of coastal and marine geotechnical engineering. This interdisciplinary course illustrates the connection between fluid and soil mechanics for analyzing infrastructure within the coastal zone.
Grade Mode: Letter Grading

CEE 778 - Foundation Design I
Credits: 4
Foundation design based on subsurface investigation and characterization using current methods of laboratory and in situ testing. Use of consolidation theory and bearing capacity theory for the design of shallow foundations including footings and rafts. Basic design of pile foundations. Earth pressure theory applied to design of retaining walls. Slope stability theory and applications.
Prerequisite(s): CEE 665 with a minimum grade of D-.
Equivalent(s): CIE 760
Grade Mode: Letter Grading

CEE 779 - Foundation Design II
Credits: 3
Advanced pile and pier design under vertical and lateral loads. Slope stability by circular and noncircular arc methods. Design of flexible bulkhead walls and mechanically stabilized walls. Excavation and dewatering. Soil and site improvement.
Prerequisite(s): CEE 778 with a minimum grade of D-.
Equivalent(s): CIE 761
Grade Mode: Letter Grading

CEE 780 - Matrix Structural Analysis and Modeling
Credits: 3
Modeling and analysis of determinate and indeterminate structures by matrix computer methods. Creation of matrix elements using compatibility, equilibrium, and constitutive relationships. Plane trusses, beams, frames, and space trusses.
Prerequisite(s): CEE 680 with a minimum grade of D-.
Equivalent(s): CIE 685, CIE 783
Grade Mode: Letter Grading

CEE 781 - Dynamics of Structures
Credits: 3
Dynamics of single- and multi-story buildings. Response due to earthquakes, blasting, traffic, and mechanical equipment. Analysis in the time domain and through the Fourier Transform. Fundamentals of structural vibration measurement.
Prerequisite(s): CEE 780 with a minimum grade of D-.
Equivalent(s): CIE 787
Grade Mode: Letter Grading

CEE 789 - Timber Design
Credits: 3
Introduces the design of timber structures. Structural properties of wood, determination of horizontal and vertical loads, horizontal and vertical load-resisting systems, and design of horizontal diaphragms, shear walls, beams, and columns. Bolted, screwed, and nailed connections.
Prerequisite(s): CEE 680 with a minimum grade of D-.
Equivalent(s): CIE 782
Grade Mode: Letter Grading

CEE 790 - Structural Design in Masonry
Credits: 3
Introduces the design of reinforced masonry structural members by the stress and strength method and considering deflection and other serviceability performance crtieria. Includes development of wind and seismic load, curtain wall, shear wall, lintels and columns. Prereq: CEE 635, CEE 680; or permission.
Prerequisite(s): CEE 635 with a minimum grade of D- and CEE 680 with a minimum grade of D-.
Equivalent(s): CIE 776
Grade Mode: Letter Grading

CEE 791 - Reinforced Concrete Design
Credits: 0 or 4
Introduces the design of reinforced concrete structural members by the strength method and considering deflection performance. Includes loads, approximate analyses, slabs, beams, and columns.
Prerequisite(s): CEE 635 with a minimum grade of D- and CEE 680 with a minimum grade of D-.
Equivalent(s): CIE 774
Grade Mode: Letter Grading

CEE 792 - Pre-stressed Concrete
Credits: 3
Analysis and design of prestressed and post-tensioned concrete sections in flexure and shear. Strength, deflection, and losses in flexural members. Optimization of section and prestressing force selection.
Prerequisite(s): CEE 791 with a minimum grade of D-.
Grade Mode: Letter Grading

CEE 793 - Structural Design in Steel
Credits: 4
Introduction to steel member design, including horizontal and vertical members for design and analysis of buildings. Examines design inputs, material choice, analysis methods and design and construction methodologies.
Prerequisite(s): CEE 635 with a minimum grade of D- and CEE 680 with a minimum grade of D-.
Equivalent(s): CIE 793
Grade Mode: Letter Grading

CEE 794 - Bridge Design
Credits: 3
Analysis of two-span, continuous, slab and beam bridges using the AASHTO LRFD Bridge Design Specifications. Use of influence lines, load distribution, load factoring, deck design, analysis and design of composite beams and plate girders. Bridge aesthetics.
Prerequisite(s): CEE 791 with a minimum grade of D- and CEE 793 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): CIE 792
Grade Mode: Letter Grading

CEE 795 - Independent Study
Credits: 1-4
Seniors in good standing may pursue independent studies under faculty guidance. A written culminating report is required.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): CIE 795
Grade Mode: Letter Grading

CEE 796 - Special Topics
Credits: 1-4
Advanced or specialized topics not normally covered in regular course offerings. May be repeated, but not in duplicate areas.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): CIE 795
Grade Mode: Letter Grading

CEE 797 - Introduction to Project Planning and Design
Credits: 2
Part one of a two-part sequence. Student groups develop a project statement to address a large-scale civil engineering system design. Each team prepares a project plan to be executed in CEE 798, part two of this sequence.
Equivalent(s): CIE 784
Grade Mode: Letter Grading

CEE 798 - Project Planning and Design
Credits: 2
Student groups are formed into design teams to prepare a design plan for a large-scale civil engineering system including consideration of budgetary constraints, building code criteria, and environmental impacts. Each team prepares a final written report and gives a formal presentation.
Attributes: Writing Intensive Course
Prerequisite(s): CEE 797 with a minimum grade of D-.
Equivalent(s): CIE 682, CIE 788
Grade Mode: Letter Grading

CEE 799H - Senior Honors Thesis
Credits: 1-3
Students in the honors program in Civil and Environmental Engineering need to complete a total of 4 credits of honors thesis during the senior and junior years, which may be used to fulfill a CEE non-design elective. CEE 799H is a two-semester thesis project guided by a faculty advisor and resulting in a written thesis in a journal article format. Students are to register for 1 credit of honors thesis during the first semester and 3 credits of honors thesis during the second semester. The student should meet with potential honors thesis faculty advisors in advance and work out what will be required with the professor willing to serve.
Attributes: Honors course
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 2 times.
Equivalent(s): CIE 799H
Grade Mode: Letter Grading

Civil Technology (CT)

No courses are currently active in the course inventory for this subject prefix.

Classics (CLAS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CLAS 400 - Exploring and Experiencing the Ancient World and its Legacy
Credits: 2
Covers aspects of the ancient world and its subsequent importance not found in the rest of the Classics curriculum or dealt with only briefly. Topics are chosen to be timely by connecting antiquity to current events, including pop culture, or to be enduring but under-appreciated. Emphasis on active and engaged learning and, where possible, experiential activities. May be repeated on different topics. Does not satisfy major requirements.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

CLAS 401 - Classical Mythology
Credits: 4
Survey of myths and sagas of ancient Greece and Rome. No classical preparation necessary. Background course for majors in English, the arts, music, history, modern languages, classics.
Attributes: Humanities(Disc)
Equivalent(s): CLAS 401H
Grade Mode: Letter Grading

CLAS 403 - Introduction to Greek Civilization
Credits: 4
A broad historical exploration of Greek civilization. Topics include: architecture, art, law, literature, philosophy, poetry, politics, religion, society, warfare, and the Greeks' legacy to the modern world. Open to all students. No prior knowledge of the ancient world assumed; all readings are in English. Ideal background for students of English, philosophy, history, Latin, Greek, the arts, music, modern languages.
Attributes: Historical Perspectives(Disc)
Equivalent(s): CLAS 405, HIST 403
Grade Mode: Letter Grading

CLAS 404 - Introduction to Roman Civilization
Credits: 4
A broad historical exploration of Roman civilization. Topics include: architecture, art, law, literature, philosophy, poetry, politics, religion, society, warfare, and the Romans' legacy to the modern world. Open to all students. No prior knowledge of the ancient world assumed; all readings are in English. Ideal background for students of English, philosophy, history, Latin, Greek, the arts, music, modern languages.
Attributes: Historical Perspectives(Disc)
Equivalent(s): CLAS 406, HIST 404
Grade Mode: Letter Grading

CLAS 444 - Individual and Society in the Ancient World
Credits: 4
This class examines one of the major issues faced by people throughout history, whether and under what circumstances an individual should act against the wishes of society. The great philosophical and historical works of the ancient world shed light not only on how the Greeks and Romans approached the idea of personal responsibility but also on the assumptions we today make about human nature and the relationships on which society depends. No prior knowledge of the ancient world required. All readings are in English.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

CLAS 444D - Athens, Rome, and the Birth of the United States
Credits: 4
What did Washington, Jefferson, Adams (John and Abigail), Madison and Paine have in common? They were all instrumental in shaping the US political system, but they were also educated in the classics. When building the framework of our democratic republic, they continually looked to Athens and Rome as models, inspirations and warnings. The course examines ancient political systems and how they helped fashion our founder's notion of the ideal government and continue to do so.
Attributes: Historical Perspectives(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

CLAS 501 - Introduction to Mediterranean Archaeology
Credits: 4
Survey of representative archaeological sites, architecture, and objects produced by the cultures surrounding the Ancient Mediterranean.
The course will focus on the structure, form, and symbolic content, or sanctuaries, cities, tombs, housing, as well as material culture such as pottery and sculpture. In addition to the overarching narrative of the history of classical archaeology, further topics include cross-cultural influences, materials and building technologies, archaeological theory and practice, and aesthetic principles.
Attributes: World Cultures(Discovery)
Equivalent(s): ARTH 501
Grade Mode: Letter Grading

CLAS 502 - Ancient Pompeii and the Bay of Naples
Credits: 4
This course analyzes the cultural development of Pompeii and adjacent sites buried by the eruption of Vesuvius in AD 79. The aim is to understand the architectural layout and material culture of the cities, their development over time, as well as understand how social norms, politics and cultural influences shaped the appearance and the built environment in the seven hundred years that Pompeii existed prior to its destruction. Through the lens of the surviving art, architecture, and material culture students will learn about everyday life in ancient Pompeii and how different social classes interacted in the city.
Attributes: World Cultures(Discovery)
Equivalent(s): ARTH 502
Grade Mode: Letter Grading

CLAS 510 - Building Rome
Credits: 4
An introduction to the buildings and structures for which the Romans remain famous, such as the Pantheon, the Colosseum, and the aqueducts that allowed Rome to become a metropolis. A major focus is the connection between the changes in Roman society and the development of Roman architecture. Looks at both Rome and other important cities in the Roman Empire. All readings are in English. No prior knowledge of the ancient world required.
Co-requisite: INCO 589
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

CLAS 511 - Special Studies in Greek History
Credits: 4
The course uses historical and literary sources in conjunction with the city of Athens itself and its archaeological remains to explore the history of a particular theme, cultural practice or institution in ancient Greek civilization. The topics changes with different instructors but always takes a fundamentally historical orientation to the material and the city, even if interdisciplinary approaches are incorporated into the coursework. CLAS 511 is offered only as part of a study abroad program.
Attributes: Historical Perspectives(Disc); Inquiry (Discovery)
Grade Mode: Letter Grading

CLAS 520A - Classical Society, Politics and Ethics: Democracies and Republics
Credits: 4
We frequently use the terms "democracy" and "republic" to describe our own political system, but where did these words and ideas originally come from? This course examines the historical development of the original democracies in Greece (primarily Athens) and the Roman Republic, as well as the particular institutions and practices that were associated with each. Course will also cover the development of democratic and republican institutions in the modern world.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

CLAS 520B - Classical Society, Politics and Ethics: Happiness and Ancient Views of the Good Life
Credits: 4
How did the Greeks and Romans define happiness and was happiness considered an essential component of the "good life"? How do ancient concepts of the "good life" influence later views of human flourishing and how do specific historical circumstances alter utopian visions of a life well lived? This course traces the concept of the "good life" from ancient Greece to today and challenges students to create their own vision of a "good life".
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

CLAS 520C - Classical Society, Politics and Ethics: Sports, Spectacle and Competition
Credits: 4
This course treats the details of athletic training and competition, but its primary focus is on investigating the importance of athletics to society and how athletics reflected the broader cultural values of the Greeks and Romans. Open to all students. All readings in English.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

CLAS 520D - Classical Society, Politics and Ethics: Greek and Roman Religion
Credits: 4
This course traces the historical development of ancient Greek and Roman religion from its antecedents in Near Eastern, Minoan, and Mycenaean culture to the rise of Christianity in Rome's early imperial period. This course also introduces students to the methods and materials of historians of religion. Topics covered in this course include: changing conceptions of divinity, animal sacrifice, sanctuaries, festivals, death and the afterlife, divination, magic, and mystery cults.
Attributes: Historical Perspectives(Disc)
Equivalent(s): CLAS 520
Grade Mode: Letter Grading

CLAS 530A - Classical Literary Performance Genres: War and Adventure in Ancient Epic
Credits: 4
Storytelling has long been one of the primary means to preserve and transmit cultural ideas and traditions. In this course students read and analyze the earliest epic tales from the Greek and Roman period with a view toward understanding the roots and nature of epic, the myths it told, and the influence it has had on subsequent literature. No credit earned if credit received for CLAS 444B.
Attributes: Humanities(Disc); Writing Intensive Course
Equivalent(s): CLAS 444B
Grade Mode: Letter Grading

CLAS 530B - Classical Literary and Performance Genres: Tragedy and Comedy on the Ancient Stage
Credits: 4
Investigations into the dramatic works of the Greek and Romans, the power of performance, and the cultural importance of stage productions. Readings include the tragedies of Aeschylus, Sophocles, and Euripides, and the comedies of Aristophanes, Menander, and Plautus. Ideal background for students of all theatrical and performance traditions. Open to all students. All readings in English.
Attributes: Humanities(Disc)
Equivalent(s): CLAS 530
Grade Mode: Letter Grading

CLAS 540A - Environment, Technology and Ancient Society: Sustaining Ancient Rome Ecology and Empire
Credits: 4
This course examines the interplay between the ancient Roman environment, Roman technological innovations, and the values of Roman imperial society. Examining Roman innovations in water supply, building technology, mining, and more, this course explores the ethical questions that arise through the use of ancient Roman technology, evaluates the effects of these technologies on the environment and Roman society, and determines whether Roman values encouraged or discouraged a responsible approach to technology and the environment.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): CLAS 515
Grade Mode: Letter Grading

CLAS 540B - Environment, Technology and Ancient Society: Roman Houses, Domestic Space and Public Life
Credits: 4
The Romans used the house as a communication technology for defining and expressing their identities in society and in the natural world. In this course, we examine literary and visual sources for Roman houses, apartments, villas, and palaces, and we compare and contrast the role of the house in the ancient world and in American society. We pay special attention to how domestic space shapes and is shaped by environment, politics, and culture.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

CLAS 540C - Environment, Technology and Ancient Society: Tech, Tools and Engineering in the Ancient World
Credits: 4
This course examines positive and negative impacts of ancient technological advances: engineering (fire, metallurgy), writing technology (scripts, including the alphabet, the emergence of papyrus and vellum), military technology (shipbuilding, defensive and offensive technologies, and navigation), artistic (invention of dyes, lost-wax methods of bronze casting), infrastructure (roads, bridges, and aqueducts), and monumentality (Stonehenge, Greek temples, and the Roman Colosseum). Focus on the ways in which societal and environmental factors influenced technological development and vice versa.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

CLAS 550A - Identities and Difference in the Ancient World: Greek and Roman Women
Credits: 4
The impact of women on society in Greece and Rome throughout Antiquity. The role of women in public, religious, and private life as well as their legal status through law codes. Men's views of women in different literary texts. Especially concentrating on the few existing texts written by women. All readings are in English.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Equivalent(s): CLAS 550
Grade Mode: Letter Grading

CLAS 550B - Identities and Difference in the Ancient World: Slaves and Masters
Credits: 4
Students explore the different ways slavery developed in the Greek and Roman worlds with an emphasis on the connections to other historical developments such as the practice of warfare, changes in political systems, and ancient views about human rights. To better understand the development of Greek and Roman slavery, we look at how the ancient systems compare to slavery in the American South and modern human trafficking.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

CLAS 550C - Identities and Difference in the Ancient World: Sex and Desire in Greece and Rome
Credits: 4
This course provides an introduction to ancient Greek and Roman conceptions of desire and sexuality, to how these conceptions developed and changed over time, and how they differ from modern ways of understanding sex, desire, and sexuality. Topics discussed include "romantic" love, attitudes towards homosexual practices, man-boy love, lesbianism, ancient views of "cross-dressing," and attitudes towards prostitution, among others.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Grade Mode: Letter Grading

CLAS 551 - Race, Ethnicity, Class & Classics
Credits: 4
Examines race, ethnicity, and class, and the ways in which they intersect with the study of the ancient world. The approach will use critical lenses alert to the impact of power imbalances both on how we view these subjects in the ancient world and how the ancients have been used to create and reinforce hierarchies in the modern world. The exact focus will vary by semester (students may repeat once if on a different topic).
Attributes: World Cultures(Discovery)
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

CLAS 575 - Ancient Near East
Credits: 4
From the Neolithic revolution to the time of Alexander the Great. Rise of civilization; nature of human artistic and intellectual development in the earliest civilizations of Mesopotamia and Egypt; Judaism in its historical setting. Course meets the History major requirements for Group III.
Equivalent(s): HIST 575
Grade Mode: Letter Grading

CLAS 601 - Classical Myth II: The Power and Persistence of Myth
Credits: 4
An in-depth look at the myths of the Greeks and Romans, at the power of myth as a cultural force, and at the importance of myth both in the ancient period as well as the modern era. The focal point is on the myths of the Greeks and Romans, but the myths of other cultures are addressed. All readings are in English.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

CLAS 675 - History of Ancient Greece
Credits: 4
Discover the exciting, turbulent, and innovative world of the Greeks through their history, from the emergence of small cities in the archaic period to the empire of Alexander the Great. Special focus will be on the political, economic and social developments in the rise of the polis (city), the Persian and Peloponnesian Wars, the rise of Macedon and Alexander the Great's conquests. CLAS 403/HIST 403 is encouraged but not necessary.
Equivalent(s): HIST 675
Grade Mode: Letter Grading

CLAS 676 - Topics in Ancient Greek History
Credits: 4
Advanced historical study of a particular period or theme in ancient Greek history. May be repeated barring duplication of subject.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): HIST 676
Grade Mode: Letter Grading

CLAS 677 - History of Ancient Rome
Credits: 4
Discover the fascinating and tumultuous history of the ancient Roman world, from its small beginnings in the early Republic to the high Empire, when Rome controlled the whole Mediterranean basin. Special focus will be on the political and economic conflicts between social classes, the Punic Wars, the fall of the Republic, its transformation into a monarchy, and the golden age of imperial rule. CLAS 404/HIST 404 is encouraged but not necessary.
Equivalent(s): HIST 677
Grade Mode: Letter Grading

CLAS 678 - Topics in Ancient Roman History
Credits: 4
Advanced historical study of a particular period or theme in ancient Roman history. May be repeated barring duplication of subject.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): HIST 678
Grade Mode: Letter Grading

CLAS 686 - UNH in Greece Study Abroad
Credits: 0-6
Study abroad in Greece. Interested students should consult a Classics advisor. Students should be advised they must meet program and university requirements for study abroad. (IA grade will be assigned until official transcript is received from the foreign institution.)
Co-requisite: CLAS 511, INCO 589
Grade Mode: Credit/Fail Grading
Special Fee: Yes

CLAS 694 - Supervised Practicum
Credits: 2 or 4
Participants earn credit for suitable pre-professional activities, including high school outreach, assisting in undergraduate courses and work with professional organizations, museum work. Enrollment limited to juniors and seniors who are Classics, Latin, or Greek majors or minors and have above-average G.P.A.s. Writing assignments are required. Course does not count toward Classics, Latin, or Greek major or minor requirements.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

CLAS 695 - Special Studies
Credits: 2 or 4
Advanced work in classics. Research paper. Not open to freshmen and sophomores.
Grade Mode: Letter Grading

CLAS 696 - Special Studies
Credits: 2 or 4
Advanced work in classics. Research paper. Not open to freshmen and sophomores.
Grade Mode: Letter Grading

CLAS 701W - Capstone Course
Credits: 4
Students will investigate the intersections of the fields of Classics, Humanities, and Italian Studies through the exploration of a common theme. Working across disciplines, students will learn how scholars from these fields have approached common issues. Students will also demonstrate their ability to conduct research by engaging in a semester-long specialized project connected to the course theme.
Attributes: Writing Intensive Course
Equivalent(s): HUMA 701W, ITAL 701W
Grade Mode: Letter Grading

College of Liberal Arts (COLA)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

COLA 401 - Liberal Arts Advising Seminar
Credits: 1
Extended Orientation course for COLA first year students.
Grade Mode: Credit/Fail Grading

COLA 402 - Digging Deep: Cool COLA Research
Credits: 1
This course, featuring research presentations and Q&A with select faculty, introduces students to what is entailed in doing research from within Liberal Arts. It will showcase the range of research projects and methods used by COLA faculty and taught to COLA students. Presentations will also illuminate how research in COLA disciplines enriches and complements other fields (e.g., natural resources, marine science, computer science, business, finance, health services) and teaches skills applicable to numerous careers tracks.
Grade Mode: Credit/Fail Grading

COLA 458 - Global Preparedness for Budapest
Credits: 1
This course is delivered online in the weeks leading up to the start of the Budapest Spring Semester Program and while students are abroad. The course will prepare students to get more out of their study abroad experience in Hungary by developing knowledge of the destination city, the procedures and features of the program, and basic intellectual training. All students participating in the program must enroll in this course.
Grade Mode: Credit/Fail Grading

COLA 500 - Pathfinder - Career Planning for Liberal Arts Majors
Credits: 2
Explore existing and emerging employment opportunities for liberal arts majors in fields including technology, health & wellness, marketing, education & training, sales, financial services, and consulting. Weekly panel conversations with industry experts, self-reflection exercises, and career assessments will facilitate this exploration. Ultimately, you will develop a tailored Career Development Plan based on your skills, values, and interests.
Grade Mode: Credit/Fail Grading

COLA 505 - Hired: A Career Boot Camp for Liberal Arts Majors
Credits: 2
This 7-week boot camp style course equips liberal arts students with the tools needed to land a job or internship. Specifically, students craft resumes, cover letters, and online profiles that effectively communicate their values, interests, and strengths. Students also execute organized job and internship searches, critique job offers and benefits packages, and hone interview skills that enable them to speak confidently about the transferable skills they have gained throughout their academic and co-curricular experience.
Equivalent(s): COLA 400
Grade Mode: Credit/Fail Grading

COLA 510 - COLA Peer Navigator Mentor Training
Credits: 0-2
The purpose of this course is to develop your leadership skills and prepare you to support first-year and transfer students through their first semester at UNH. Peer Navigators serve an important role in COLA and in the lives of first-year transfer students, serving as a bridge to the UNH campus and community. As part of this course, you will learn to facilitate activities and discussions in-class and online, give positive feedback, hold office hours, refer students to campus resources, and act as a learning coach and student advocate.
Repeat Rule: May be repeated for a maximum of 6 credits.
Grade Mode: Credit/Fail Grading

COLA 610 - Interdisciplinary Internship Seminar
Credits: 2
A weekly seminar that supports students in making meaning of their semester-long, non-clinical work-based learning experience. Through guided discussion, journaling, and readings, students explore workplace expectations, communication, supervision, teamwork, professional identity, and the future of work. A final presentation and reflective activities help students connect their liberal arts education to their professional goals and articulate the value of their internship for future employment or graduate school applications.
Co-requisite: COLA 611
Grade Mode: Letter Grading

COLA 611 - Interdisciplinary Internship
Credits: 1-6
Supervised non-clinical work-based learning experience in a professional setting related to a student's career interests and goals. Students complete approximately 45 hours of fieldwork per credit over the term.
Co-requisite: COLA 610
Grade Mode: Credit/Fail Grading

COLA 653 - Introduction to British Culture
Credits: 4
Why do the British say “Sorry” for everything? What is the role of the monarchy? Does the British class system still exist? What is it like being British-born of Indian parents? How many languages are spoken in London? What is a stiff upper lip anyway? These are only a tiny fraction of the questions that will surface during your stay in London. Through class discussions, readings, written ruminations, and excursions, you will in this course explore a range of cultural elements and challenges unique to the United Kingdom in general and London in particular, from the light (British etiquette) to the substantial (the impact of immigration).
Co-requisite: COLA 655, COLA 670, INCO 588
Grade Mode: Letter Grading

COLA 655 - London Program
Credits: 0-18
Enables students to pursue a semester or academic year of in UNH's programs in London, England. Students must be admitted before enrolling in the course. For information and application forms, consult program secretary. IA (continuous grading) grade will be assigned until official transcript is received. Program fee.
Co-requisite: COLA 653, INCO 588
Attributes: World Cultures(Discovery)
Grade Mode: Credit/Fail Grading
Special Fee: Yes

COLA 658 - Humanities Spring Budapest Program
Credits: 0-16
Enables students to pursue a spring semester in UNH's program in Budapest, Hungary. The program is designed to provide undergraduates with an intensive study abroad experience focusing on modern Hungarian and Central European history and culture. Students study at Karoli Gaspar University and take courses taught by Hungarian and University of New Hampshire faculty. Under the supervision of a UNH faculty member in residence, students carry a four course load, two of which (HUMA 550 and HUMA 551) are taught by the UNH faculty member. All courses are taught in English. Students must be admitted before enrolling in this course.
Attributes: World Cultures(Discovery)
Grade Mode: Credit/Fail Grading
Special Fee: Yes

COLA 670 - The London Project
Credits: 4
The London Project will be one of the two UNH courses that UNH students participating in the UNH London Program will be required to take. This course will guide students through the research, writing/producing, and presentation of a project that explores one very narrow slice of London. The goal is to allow each student to gain insight and understanding of a subject that intrigues him/her and to present findings in a form that is appropriate for the subject and the talents of the author. Those forms could range from an academic research paper, a piece of creative writing, a multimedia slide show, a video, a podcast, or perhaps a Power Point presentation. By asking students to become fluent in one London issue, this course complements the other UNH course, Introduction to British Culture, which covers a range of British customs, challenges, and cultural elements.
Co-requisite: COLA 653
Grade Mode: Letter Grading

Communication (CMN)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CMN 440A - Honors/The Language of Addiction: Stigma, Social Relations, and Drug Use
Credits: 4
How does our culture relate to and talk about people who use drugs? Discussions of the "opioid epidemic" often rely on models of addiction - the "moral model," "disease model," and "psychosocial model" - that emerge from a view of individuals as self-contained, without taking social contexts into account. As a result, people who use drugs - especially those who inject drugs - are stigmatized as morally bankrupt, disease-ridden, or psychosocially maladjusted individuals. This course will explore how stigma functions as a byproduct of a system of social relations in which various forms of inequality are reproduced through the discourses around drugs. Through readings, discussions, and assignments, we will pull back the veil on language and social relationships to better understand how we think about ourselves, our social institutions, and what we are capable of doing about substance misuse.
Attributes: Honors course; Social Science (Discovery)
Grade Mode: Letter Grading

CMN 455 - Introduction to Media Studies
Credits: 4
Nature, development, and the effects of mass media. Overview of mass communication history and theory.
Attributes: Social Science (Discovery)
Equivalent(s): CMN 455H
Grade Mode: Letter Grading

CMN 456 - Propaganda and Persuasion
Credits: 4
Introduction to theories of propaganda and persuasion. Examination of symbolic strategies designed to secure or resist social and institutional change. Attention given to case studies of social, political, economic, and religious reformation. Special consideration of the ethical ramifications of such efforts.
Attributes: Humanities(Disc)
Equivalent(s): CMN 456H
Grade Mode: Letter Grading

CMN 457 - Introduction to Language and Social Interaction
Credits: 4
An introduction to the study of the conversational basis of social reality. Presents an overview of interpersonal communication processes and the ways in which they influence the formation of identity, personal relationships, gender, interactional patterns, conflict, culture, and power. Readings and class material from a variety of authors in the communication discipline as well as related fields in the humanities and the social sciences.
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

CMN 500 - Public Speaking
Credits: 4
Performance course buttressed by practical theories of public discourse. Focus on analysis of speaking situations and audiences, message construction, presentation, and critical evaluation. Does not count towards the CMN major.
Equivalent(s): CA 450
Grade Mode: Letter Grading

CMN 504 - Introduction to Argumentation
Credits: 4
Persuasive discourse as inquiry and advocacy grounded in practical inductive and deductive reasoning. Discovery, analysis, and testing of practical arguments. The nature and function of proof. Some emphasis on applied presentation.
Attributes: Inquiry (Discovery); Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 505 - Analysis of Popular Culture
Credits: 4
Locates the development of popular cultural artifacts and practices within the 20th-century social history of the U.S. Examines the political-economic forces that underpinned the commercialization of art, leisure, sports, and other elements of culture in industrial and postindustrial America.
Attributes: Inquiry (Discovery)
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 507 - Introduction to Rhetorical Theory and Analysis
Credits: 4
Major precepts of rhetorical theory. Application of those precepts in analysis and understanding of a wide range of human communication. Consideration of how precepts and issues of rhetorical theory apply to contemporary issues and problems.
Attributes: Inquiry (Discovery)
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 514 - Analysis of Online Identity
Credits: 4
This course will explore how digital media technologies inform strategies of self-presentation and practices of identity formation. We will situate contemporary practices of self-presentation within the historical development of the internet and sociological theories of identity. Students will be encouraged to examine how the internet and mobile technologies challenge existing understandings of concepts such as anonymity, authenticity, reputation, and privacy. Throughout the course, students will be asked to think critically about the ways in which traditional identity markers - such as race, gender, and class - are both challenged and reproduced in digital environments. Drawing on the current digital media landscape, we will explore several contemporary issues including privacy and reputation, self-branding and microcelebrity, online dating, and self-tracking. Throughout the semester, students will use academic literature to identify and address real-world problems.
Prerequisite(s): CMN 455 with a minimum grade of D- or CMN 456 with a minimum grade of D- or CMN 457 with a minimum grade of D-.
Grade Mode: Letter Grading

CMN 519 - Advertising as Social Communication
Credits: 4
Social role of advertising, public policy debates concerning advertising, influence of advertising on culture, and methods of analyzing advertising messages.
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 525 - Persuasion & Public Relations
Credits: 4
An exploration of the persuasion genres, techniques, roles, and stages in the practice of public relations across the full range of rhetorical situations and organizations.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of D- or CMN 456 with a minimum grade of D- or CMN 457 with a minimum grade of D-.
Grade Mode: Letter Grading

CMN 529 - Data for Sale: Capitalism and the Surveillance Economy
Credits: 4
Surveillance, the practice of tracking and recording information about people, is central to modern capitalist societies. Capitalists rely on surveillance systems to supervise workers and managers, identify customer markets, keep accounts, and calculate the risk of investments and innovations. While such practices can increase profits, they also pose threats for privacy and individual freedom. This course explores the relationship between capitalism and surveillance, and considers the role of surveillance as a mode of economic world-building and social control in the past and present.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

CMN 535 - Digital Democracies
Credits: 4
This course explores how emerging digital technologies alternately enhance and obstruct the pursuit of democratic values, broadly conceived. We examine the history and meaning of terms like democracy and freedom in the context of both politics (campaigns, voting, legislation) and culture (music, entertainment, and the arts); the history of computers and the Internet; and the impact of digital media on international politics and professional journalism.
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 540 - Special Topics in Communication
Credits: 4
Selected topics not covered by existing Communication courses. Topics may vary. Courses are available in the department office or online prior to each semesters registration period. May be repeated barring duplication of topic.
Prerequisite(s): CMN 455 with a minimum grade of D- or CMN 456 with a minimum grade of D- or CMN 457 with a minimum grade of D-.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

CMN 545 - Media, Religion, and Culture
Credits: 4
This course examines the impact of media on religious belief, practice, and institutions in an American context. We cover the rise of evangelicalism; the development of religious denominations and political parties; the birth of religious broadcasting including the rise of televangelism; and the decline of institutional religion with the emergence of a "spiritual marketplace." We examine religious representations in popular film, music, and news, and ask whether digital technologies have become imbued with religious meaning.
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 562 - Collaborative Leadership in the 21st Century
Credits: 4
This course grounds the study of interaction in groups via theories of inter-organizational collaboration. Students will leave this course with a very specific set of knowledge and skills related to dialogue, principled negotiation, constructive conflict, consensus decision making and appreciative inquiry. Lessons focus on the development of a responsible ethic regarding how to share power among diverse group members. This ethic prepares you to lead collaborative groups in organizations, communities, and as family members.
Grade Mode: Letter Grading

CMN 567 - Gender, Race, and Class in the Media
Credits: 4
The purpose of this course is to introduce students to contemporary critical scholarship on the construction of gender, race, and class in the media - particularly popular media. Subjects such as the portrayal of ethnic groups, ideal body image, blue collar men, and gay, lesbian, bisexual, and transgender groups are case studies. This course is one that introduces students to performing communication analysis.
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 576 - Introduction to Civil Discourse
Credits: 4
From our classrooms to our social media feeds, and our living rooms to our legislature, the vibrancy of our democracy hinges on how we talk about complex public issues, problems, and decisions that impact our communities. Yet these conversations are often difficult and make it tough to work together productively. We will contemplate the question:#How do we talk about issues we are concerned about in ways that encourage more meaningful thinking, community collaboration, and problem-solving?#To answer this question, we examine civil discourse in practice, including the role it plays in our U.S. democracy and civic structure, the civility/un-civility of collective action and protest; the possibilities of public dialogue and deliberation as part of a participatory democracy; and the role of collaborative inquiry in addressing public problems. Using a case study about the first amendment and freedom of expression on U.S. college campuses for critical reflection, we will consider the complex dynamics of our civic landscape, the various mindsets necessary for engaging in civil discourse across these contexts, and the potential for cultivating more productive civil discourse around contentious issues in diverse contexts.#Our primary objective will be to appraise the challenges and opportunities for fostering civil discourse in contemporary democratic discussion and decision-making in politics, organizations, on campus, and in our communities. We also will practice civil discourse, dialogue, deliberation, and collaborative inquiry, and consequently, this course is very discussion-focused and prioritizes partnered and small group work.
Attributes: Social Science (Discovery); Inquiry (Discovery)
Equivalent(s): CMN 585H
Grade Mode: Letter Grading

CMN 580 - Lying, Deception and the Truth
Credits: 4
The ability to lie is a defining feature of the social life of higher order primates and humans. Deceiving, concealing, lying and evading are forms of communication which are a basic part of everyday human life. This course will explore the structure and function of lying, deception and evasion in the course of communication. As we do so we will also explore the nature of truth as it applies to human interaction in the world.
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 585H - Honors/Civil Discourse for Complex Problems
Credits: 4
In this course, we will contemplate the question: How do we talk about issues we are concerned about in ways that encourage more meaningful individual and community engagement? Civil discourse is a means of bringing people together to solve public problems. This course engages students in how to build interpersonal connections, cultivate a sense of belonging, increase problem-solving capacity, and foster more productive citizenship in our communities. Through project-based learning, students will become empowered with the professional currency needed to thrive in the 21st century workplace: collaboration and leadership skills, critical thinking, and the ability to frame and solve complex problems. As a class, we will examine civil discourse in practice, including the role it plays in our U.S. civic structure, the civility/uncivility of advocacy, activism, and protest; the possibilities of public dialogue and deliberation as part of a participatory democracy; and the role of collaborative inquiry in addressing public problems. Our primary objective will be to appraise the challenges and opportunities for fostering civil discourse through dialogue and deliberative decision-making in politics, organizations, on campus, and in our communities. In small groups and via facilitated classroom conversations, we will practice civil discourse, dialogue, deliberation, and collaborative inquiry while we contemplate the complex dynamics of our civic landscape and various mindsets necessary for engaging in civil discourse across these contexts. Honors students will work together to ask critical questions about “How should we learn and work with AI in the university context?” and make recommendations to UNH community stakeholders regarding best practices, goals, resources, and recommendations for community-engaged civil discourse interventions.
Attributes: Honors course; Social Science (Discovery); Inquiry (Discovery)
Equivalent(s): CMN 576
Grade Mode: Letter Grading

CMN 588 - Analyzing Institutional Interaction
Credits: 4
Examinations of institutional interactions in emergency services, justice/law, medicine, family school encounters, journalism and politics. Shows how the work of society gets done through interaction. Students get hands-on experience analyzing persons' conduct in these interactions. This course is designed to develop students' analytic skills in studying social interaction in institutions, using recorded data in the form of naturally-occurring interactions in these settings.
Attributes: Inquiry (Discovery)
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 596 - Special Topics in Media Studies
Credits: 4
Selected topics not covered by existing courses in media studies. Topics vary; course descriptions are available in department office during preregistration. May be repeated for credit if topics differ.
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 598 - Special Topics in Interpersonal Studies
Credits: 4
Selected topics not covered by existing courses in interpersonal communication. Topics vary; course descriptions are available in department office during registration. May be repeated for credit if topics differ.
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

CMN 599 - Internship
Credits: 1-4
Internships are designed to integrate classroom study and supervised practical experience in a work setting. Each student is required to write a series of reports focusing on aspects of the work experience that are related to coursework in the Communications Department. These assignments are designed to enhance a student's ability to reflect critically on the internship experience and to merge theory and practice. Assignments are available, depending on the number of credits granted (1-4). Students are expected to hold the common exam time (TR, 1240-2) open for occasional meetings. Before starting the internship, students must submit a written proposal to both the work supervisor and the faculty sponsor. The proposal should include detailed information on the duties and responsibilities to be undertaken at the internship site and on the goals and learning objectives as relevant to the Communication Department curriculum.
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

CMN 607 - Persuasion in American Politics
Credits: 4
Study of the forms and strategies of persuasive discourse employed by contemporary American political leaders. Analysis of important political addresses of the 20th century, with attention to theoretical and critical issues in political communication and public address. Discussion of the status of rhetoric in modern politics, and the impact of persuasive discourse on campaigns, policy decisions, crisis management, political scandal, and the national identity. Students are required to have taken two 500 level CMN courses (C-) prior to this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 614 - Gender, Race and Technology
Credits: 4
Why do digital assistants have women's voices? Are highways racist? This course explores the influence of gender and race on communication technologies. Drawing on communication, gender studies, critical race studies, and science and technology studies, this class engages in a social examination of everyday technologies. We examine the historical relationship between gender, race, and technology and understand how design decisions influence the meanings of communication tools. Students are required to have taken two 500 level CMN courses (C-) prior to this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 620W - Global Media, Culture, and Power
Credits: 4
This past century, communication and transportation technologies connected the world as never before. As people and ideas move with increasing ease, how are traditional notions of culture being challenged worldwide? This course uses theory and examples from politics and popular culture to explore the construction of culture and cultural difference. It examines the political an economic consequences of mediated ideas of culture, including their relationship to race, nationalism, and transnational inequities. Completion of two CMN 500-level courses required prior to taking this course.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of D- or CMN 456 with a minimum grade of D- or CMN 457 with a minimum grade of D-.
Grade Mode: Letter Grading

CMN 622 - Digital Rhetoric
Credits: 4
This course examines how traditional rhetorical theories and methods apply in contemporary digitized environments. It asks whether we can employ, as is, traditional theories and methods, many of which were developed centuries ago, or whether we need to develop new approaches in order to understand persuasion in online contexts. As it explores these issues, this course tackles both rhetorical production and rhetorical analysis. That is, it asks students to both create and analyze digital rhetoric. Students are required to have taken two 500 level CMN courses (C-) prior to this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 634 - Media and Politics
Credits: 4
The goal of this course is to study the role of the media in American politics, and what media evolution means for future politics. Topics such as political campaigns, media effects, news reporting, framing terrorists, etc. are studied in depth. Timely topics such as "are the media liberal or conservative?" are debated in class. Research projects and papers study questions related to important social issues such as women in the media. Students are required to have taken two 500 level CMN courses (C-) prior to this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 635 - Contemplative Media Studies
Credits: 4
Contemplative Media Studies involves the application of contemplative practices and principles to the critical analysis of media content, technology, and institutions. It links Media Studies to Contemplative Studies, which integrates empirical social-science research (neuroscience, psychology) to first-person practices like meditation, yoga, and art therapy. Through academic essays and arts-based assignments, students strive to become more mindful digital citizens-creative yet critical, hopeful yet judicious with regard to the current and future course of technical development. Students are required to have taken two 500 level CMN courses (C-) prior to this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 637 - Controversy and Reasoning in Law
Credits: 4
Uses rhetorical analysis and criticism to evaluate communication practices in courtroom disputes. Compares conventional American litigation to alternative methods. Explains how stages of a trial shape communication options and norms. Illustrates common subjects and forms for judicial reasoning. Students are required to have taken two 500 level CMN courses (C-) prior to this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 647 - Rhetorical Criticism of Media
Credits: 4
Use of rhetorical approaches and methods in the analysis and criticism of contemporary forms of visual media culture. Students examine the social, political, and aesthetic implications of contemporary media forms from within a framework of rhetorical theory. Emphasis on practical analysis employing various rhetorical approaches with a goal of understanding persuasive elements in contemporary media (including television, film, print & broadcast advertising, internet, and social media). Students are required to have taken two 500 level CMN courses (C-) prior to this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 650W - Critical Perspectives on Film
Credits: 4
Advanced, focused study of film theory as cultural practice. Topics vary from year to year and with instructor. May be repeated for different topics. Focus may range from general considerations of film theory, criticism, and history, to specific analyses of selected genres, directors, national cinemas, and periods. Course descriptions available in department office during preregistration. Students are required to have taken two 500 level CMN courses (C-) prior to this course, unless granted instructor permission. May be repeated for credit if topic is different.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated for a maximum of 12 credits.
Equivalent(s): CMN 650
Grade Mode: Letter Grading
Special Fee: Yes

CMN 656 - Environmental Communication and Rhetoric
Credits: 4
Working from a rhetorical perspective toward communication as persuasive action, students learn to analyze environmental communication in public spheres. Communication about the environment is examined in visual and popular culture, print and digital news, advertising and marketing, science communication, corporate communication and advertising, and campaigns and movements. Special attention to issues of public engagement, citizen activism, and public advocacy. Students work on a semester long case study in which they analyze, evaluate, and respond to communication about an environmental problem in a local town. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 657W - Media and the Environment
Credits: 4
There are few topics, beyond communication itself, which better reflect our interconnected humanity than "the environment." Mediated environmental messages surround us, whether about expansive issues like climate change or the newest, organic or sustainable product. These mediated messages often come together or diverge around conceptualizations of our environment hinging on risks and uncertainties about the fundamentals of contemporary society. This course will look at the study and practice of the environment and media through a range of concepts, ranging from the "sacrificial landscape" reflected in television shows such as the first season of HBO's True Detective to the "growth machine," as a persistent framework to understanding risk amid the imperative of economic growth in contemporary capitalism.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of D- or CMN 456 with a minimum grade of D- or CMN 457 with a minimum grade of D-.
Grade Mode: Letter Grading

CMN 662 - Public Dialogue and Deliberation
Credits: 4
This course explores the theory behind the practice of public dialogue and deliberation. It considers the distinctions and appropriateness of different types and aims of public participation, and how to best facilitate conversations important in the public sphere. The course anchors civil discourse as vital to democracy. Students will design, organize, and implement a public dialogue on campus, facilitating discussions on a relevant topic serving our community. Students marry practice with deep consideration of issues of equity, diversity, voice, representation, neutrality, and power. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 666 - Conversation Analysis
Credits: 4
Exploration in how participants in interpersonal communication display their orientation to the fundamental orderliness of conversational sequences in everyday, institutional, and mass media settings. Basic concepts covered include the interactional co-construction of turn-taking, repair, overlap, openings, closings, silences, adjacency, pairs, disagreement, preference, and the role of various linguistic, paralinguistic, and nonlinguistic features in the conversation process. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 667 - Popular Music Studies
Credits: 4
This course provides an opportunity to critically examine and study popular music. Popular music represents one of the most significant global cultural industries, transcending borders and economies, especially as technology ushers in new ways to listen, share, produce, and perform music. This course will look at the role of contemporary popular music in providing a mediated form of communication and culture by examining its historical and cultural development. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 670 - From Silicon Valley to Foxconn: Global Digital Capitalism
Credits: 4
From young Internet users in Ghana's Internet cafe to American teenagers to Chinese factory workers assembling iPhones, and Indian coders migrating to Australia, this course exposes you to the multifaceted lived experiences under global digital capitalism while grounding them in the history and theory of capitalism as an uneven world system. The design of this course encourages you to think critically about what's new and not so new about capitalism in its contemporary digital/neoliberal phase. It helps identify the on-going technology-driven social transformations on a global scale. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 675 - Civil Discourse Lab: Public Dialogue, Equity, & Authenticity
Credits: 2
Students will learn the theoretical underpinnings of civil discourse to promote public dialogue on "should questions" by connecting research to social/civic policy and ethics (e.g. What should we do to increase equitable access to sustainable energy for our communities? Or, what should we do to create more ethical leaders in our local communities?) The class will teach students public engagement processes framed through a dialogic ethic that fosters relationships based on honesty, respect, reciprocity, humility, and trust. Students will examine and think together about issues important to a civil society through a public dialogue and deliberation framework. Students that complete both 2-credit courses CMN 675 and CMN 676, may use the courses together to fulfill one (1) writing intensive course requirement.
Grade Mode: Letter Grading

CMN 676 - Civil Discourse Lab: Public Deliberation and Issue Framing
Credits: 2
Students will learn the theoretical underpinnings of civil discourse to promote public deliberation on "should questions" by connecting research to social/civic policy and ethics (e.g. What should we do to increase equitable access to sustainable energy for our communities? Or, what should we do to create more ethical leaders in our local communities?) The class will focus on public deliberation with special emphasis on creating a students' citizen's initiative review impact statement. Students that complete both 2-credit courses CMN 675 and CMN 676, may use the courses together to fulfill one (1) writing intensive course requirement.
Grade Mode: Letter Grading

CMN 685 - Gendered Rhetorics
Credits: 4
This course focuses on exploration of the social, rhetorical, and communicative construction of gender through contemporary contexts. We will examine popular and political discourse and discuss how such discourse structures and disciplines our everyday experiences of sex (male/female) and gender (how society shapes understanding of those categories). Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading
Special Fee: Yes

CMN 696W - Seminar in Media Studies
Credits: 4
Variable topics in media research, theory, and practice. May be repeated for different topics. Topic descriptions available in department office during preregistration. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated up to 1 time.
Equivalent(s): CMN 696
Grade Mode: Letter Grading

CMN 697 - Seminar in Rhetorical Study
Credits: 4
Variable topics in rhetorical research, theory, and practice. May be repeated for different topics. Topic descriptions available in department office during preregistration. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated up to 1 time.
Equivalent(s): CMN 697H
Grade Mode: Letter Grading

CMN 698 - Seminar Interpersonal Studies
Credits: 4
Variable topics in interpersonal research, theory, and practice. May be repeated for different topics. Topic descriptions available in department office during preregistration. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated up to 2 times.
Grade Mode: Letter Grading

CMN 702 - Seminar in Interpersonal Communication Theory
Credits: 4
In-depth concentration on a particular theoretical orientation in interpersonal communication. Original works are read. Theoretical orientation varies by semester. May be repeated for different topics. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

CMN 703 - Seminar in Rhetorical Theory
Credits: 4
Focused study of problems in rhetorical theory construction through examination and criticism of selected theoretical frameworks used to explain or interpret rhetorical phenomena. May be repeated for different topics. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

CMN 719 - Surveillance and Society
Credits: 4
Surveillance is fundamentally concerned with social control. The course tracks the historical development of surveillance, from its origins in embodied experience and record keeping through the rise of computing, social media and big data. This history provides a backdrop against which critical theories of surveillance are introduced, drawing attention to how power is exercised through systems of identification, social classification, visibility, and statistical knowledge. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 735 - Media & Ethics
Credits: 4
This course asks how human beings can flourish (i.e. lead meaningful and purposeful lives) in the context of increasingly complex systems of digital media and information systems. We do so through the lens of virtue ethics, meaning that we place special emphasis on concepts like authenticity, wisdom, courage, and integrity. The course's capstone project asks students to develop a clear and well-informed ethical framework for the mass-mediated aspects of their personal, professional, and civic lives. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 740 - Seminar in Communication Research and Theory
Credits: 4
In-depth concentration on particular theoretical and methodological orientations within communication research. Orientations vary by semester. May be repeated barring duplication of subject. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

CMN 756 - Rhetorics of Display
Credits: 4
This course examines a selection of displays with the goal of acquiring perspective for understanding and evaluating how they engage with people who come into contact with them. Displays examined range among oratory, photographs, advertisements, films, architecture, monuments, and statuary, public demonstrations, and presentations of self. Attention is given to questions about identity and belonging, authenticity and simulation, and public memory. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading
Special Fee: Yes

CMN 762 - Organizational Communication and Society
Credits: 4
This course will demonstrate how communication is key to understanding how organizations work. Through such topics as culture, identity, structure, systems, globalization, and change, the course examines the ways individuals and society are shaped by interactions with the organizations. Through case studies, we examine the way people communicate in organizational contexts, and the social, ethical, and sometimes political implications. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 772 - Seminar in Media Theory
Credits: 4
Detailed analysis of major theories related to the interaction of communication technologies and society. Application to current examples in politics, advertising, and entertainment. May be repeated for a different topic. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C or CMN 456 with a minimum grade of C or CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

CMN 780 - Communication and Sports Coaching
Credits: 4
There is a long-standing literature on what makes for good or bad coaching in sports, but less in what interactional practices are involved in the actual activities of coaching. Here we learn about the processes of Communication used by Coaches and Athletes when in sports settings. The course will explore the basic process of communication underpinning learning in settings of movement and learning. Students will develop a focal project on practices of Communication in Coaching.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

CMN 785 - Communication and Deliberation Across Differences
Credits: 4
This course will focus on the art of rhetoric in a civic context, or how students may engage with the rhetorical tradition to focus on connections among communication, democracy, knowledge, power, and equity. Students will focus on learning the skill of deliberation, or bringing people together in conversation across difference to discover shared values, and to identify key tensions, in order to explore possible solutions to thorny public problems. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C and CMN 456 with a minimum grade of C and CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 788 - Opening Everyday Interaction
Credits: 4
Examination of how everyday human social interactions begin. Provides hands-on experience analyzing verbal and nonverbal social actions during naturally occurring interactions, including telephone conversations and especially face-to-face encounters between previously acquainted and unacquainted persons socializing and/or doing work. Explores how parties use the openings of interactions to (re)-create and maintain social relationships. Encourages students to develop intellectual curiosity about everyday social life. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of C and CMN 456 with a minimum grade of C and CMN 457 with a minimum grade of C.
Grade Mode: Letter Grading

CMN 795 - Independent Study
Credits: 1-4
Advanced individual study in rhetoric, media, or interpersonal communication. Project to be developed with supervising instructor.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): CMN 795W
Grade Mode: Letter Grading

CMN 796 - Comm-Entary Journal
Credits: 1
Serve on the editorial board of student run communication journal. Elective credit which does not count toward the major. Students are required to have taken two 500 level CMN courses (C-) to take this course, unless granted instructor permission.
Prerequisite(s): CMN 455 with a minimum grade of C and CMN 456 with a minimum grade of C and CMN 457 with a minimum grade of C.
Repeat Rule: May be repeated for a maximum of 2 credits.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

CMN 799H - Honors Thesis
Credits: 4
Written thesis based on substantial and original research under the direction of a full-time member of the communication faculty. Thesis must be in the form and style of a publishable, scholarly work. Restricted to seniors seeking honors in major.
Attributes: Honors course
Grade Mode: Letter Grading

Communication (COM) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

COM 440 - Persuasive Communication
Credits: 4
This course provides an in-depth understanding of persuasive principles with the purpose of identifying and critiquing communication strategies encountered on a daily basis. Students are introduced to the theory and practice of persuasive communication with an understanding of how classical modes of rhetoric offer an excellent framework for improving information-age communication skills. Speaking, listening, leading, motivating, negotiating, creating and delivering a message, and engaging with an audience are emphasized as key elements of persuasive communication. Students will be able to recognize the persuasive strategies used in interpersonal and mass communication settings, critique the effectiveness of the strategies used, and develop persuasive strategies for themselves.
Attributes: Writing Intensive Course
Equivalent(s): COMM 540G
Grade Mode: Letter Grading

COM 460 - Interpersonal Communication and Group Dynamics
Credits: 4
Designed to provide both a theoretical and practical introduction to interpersonal communication and group dynamics, this course explores the unique process, purposes, problems and possibilities of communication. Emphasis is placed on participation and awareness of communication behaviors, both in interpersonal settings and in small groups, as portrayed in the generic roles of member, leader, and process observer. The course challenges students to analyze the complex nature of relationships by applying the concepts of collaboration, cohesiveness, group decision-making, conflict resolution, the function of teams, and the role of facilitation. COM 460 students are guided in developing basic interpersonal, intercultural, and group communication skills that they can apply to personal and professional encounters in everyday life.
Attributes: Communication (Gen Ed)
Equivalent(s): COMM 542G
Grade Mode: Letter Grading

COM 465 - Communication Theory
Credits: 2
This course introduces students to the major theories of communication that are foundational to the discipline. Students will conceptualize how theory can be used to describe, analyze, and explain communication issues and events. Attention is also given to the ethical implications of theory in various contexts.
Equivalent(s): COMM 510G
Grade Mode: Letter Grading

COM 480 - Visual Communication
Credits: 4
In contemporary communication, visual information has become the predominant means to convey messages and information. Students will explore and analyze the different ways images can be used to communicate information, concepts, and narratives, as well as to support persuasive arguments in oral presentations. Students will apply what they have learned to two major projects, each designed to communicate a central message to a defined audience. An introduction to copyright, Fair Use, and Creative Commons is included.
Attributes: Communication (Gen Ed)
Equivalent(s): COMM 543G
Grade Mode: Letter Grading

COM 504 - Web Development I
Credits: 4
This course is an introduction to multimedia design with an emphasis on website creation. Students gain an understanding of the terminology, development tools, and fundamental skills related to designing a successful website. Current software applications are learned as appropriate to the process.
Equivalent(s): COMM 504G
Grade Mode: Letter Grading

COM 535 - Visual Media Production
Credits: 4
This course focuses on how to create visual narratives through digital media. Course projects and use of visual media production software provide an opportunity to carefully execute each step of the production process, to include: conceptualizing, outlining, writing script for voiceover, creating the storyboard, recording, editing, and sharing. Attention to copyright, attribution, and other ethical considerations are also addressed. Recommended: COM 480 Visual Communication.
Equivalent(s): COMM 505G
Grade Mode: Letter Grading

COM 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in Communication. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): COMM 544G
Grade Mode: Letter Grading

COM 545 - Digital Illustration
Credits: 4
This course introduces Adobe Photoshop and Illustrator. Course assignments focus on creating and preparing raster and vector-based images for print and web. Students will have the opportunity to attain basic proficiency with both software programs while applying knowledge and skill to a variety of projects. Concepts such as photo manipulation, use of digital illustration in layout, basic animation, storage and file management, and copyright and ethical issues are addressed.
Prerequisite(s): ART 512 with a minimum grade of D- or ARTS 512G with a minimum grade of D-.
Equivalent(s): COMM 545G
Grade Mode: Letter Grading

COM 560 - Intercultural Communication
Credits: 2
Effective intercultural communication skills are important in a multicultural society, particularly for those individuals working in positions that require effective interactions with people from diverse cultures. This course is a study of cross-cultural contacts and will include analysis of verbal and nonverbal communication and related factors within and between various cultures, predictions of patterns and effects, and communication barriers. The course provides opportunities for students to develop both an appreciation for cultural differences and effective intercultural communication skills.
Equivalent(s): COMM 560G
Grade Mode: Letter Grading

COM 562 - Gender and Communication
Credits: 2
In this course, students examine multiple influences that have shaped definitions of masculinity and femininity over time. Students explore the impact of these definitions on "appropriate" prescriptions for verbal and nonverbal communication, and on interactions in personal and professional contexts. Through the analysis and critique of the effects of gender on communication in diverse relationships (family, friendships, romantic, professional) and in diverse contexts (personal and professional spheres), as well as how gender is depicted in the media, students recognize the profound impact that gender has upon our lives.
Equivalent(s): COMM 562G
Grade Mode: Letter Grading

COM 590 - Professional Communication
Credits: 4
This course prepares students to navigate the complexity of professional communication in the 21st-century workplace, with a particular emphasis upon refining the writing skills that are essential to clear, concise, and professional communication. The types of professional writing addressed may include: proposals, emails, newsletters, presentations, and agendas, among others. Emphasis is also placed upon how to discern which channel--written, verbal, or digital--is most appropriate relative to context, purpose, and audience.
Attributes: Writing Intensive Course
Prerequisite(s): (ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-) and (COM 460 with a minimum grade of D- or COMM 542G with a minimum grade of D-) or (Has Accred Associate Deg with a score of WAIV or Has Accred Bachelor Deg with a score of WAIV).
Equivalent(s): COMM 605G
Grade Mode: Letter Grading

COM 595 - Writing for Voiceover
Credits: 2
Writing and performing voiceover audio is a specialty skill all media producers will be called upon to develop. A well-written script for voiceover will enable the audience to clearly understand messages and meaning according to the producer's goal. This course introduces students to the foundational principles of writing voiceover copy and provides opportunities to refine voiceover performances to engage the audience and establish credibility. Through a workshop format, students will create original works and performances as well as adapt and refine works written by others.
Equivalent(s): COMM 648G
Grade Mode: Letter Grading

COM 644 - Special Topics: Upper Level
Credits: 1-4
The study of current and variable topics in Communication. Course content changes from term to term. It is expected that the learner will have prior coursework or experience in the subject area.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): COMM 644G
Grade Mode: Letter Grading

COM 645 - Advanced Digital Illustration
Credits: 4
This course builds upon COM 545 Digital Illustration by challenging students to advance their skills in Adobe Photoshop and Illustrator. Course projects entail combining vector and raster images, advanced image manipulation, and utilizing web graphics, print images, and interactive motion graphics for web and video. Effective application of design elements and principles in concept generation will be emphasized. Through peer review, instructor feedback, and reflection, students explore each phase of the design process in depth. Strategies for assembling a digital portfolio are also explored.
Prerequisite(s): COM 545 with a minimum grade of D- or COMM 545G with a minimum grade of D-.
Equivalent(s): COMM 645G
Grade Mode: Letter Grading

COM 647 - Writing for Visual Media
Credits: 4
By emphasizing the interplay between text and image in the production of meaning, this course introduces students to the unique attributes of writing for visual media. In a workshop format, students will refine skills in areas such as blogging, copy writing, landing pages, social media, and public relations. The course surveys various stages in the writing process, to include concept, drafting, integrating stakeholder feedback, and revision, in order to produce a final product.
Attributes: Writing Intensive Course
Equivalent(s): COMM 547G
Grade Mode: Letter Grading

COM 660W - Leveraging AI in Workplace Communication
Credits: 4
This course focuses on developing effective workplace communication skills across professional contexts such as reports, presentations, emails, memos, and social media posts. Students will evaluate strategies for promoting clarity, efficiency, and audience engagement, and design communication approaches tailored to specific organizational scenarios. Building on these foundations, the course explores how artificial intelligence (AI) tools—such as chatbots, virtual assistants, sentiment analysis, and content generation—can be applied to enhance, but not replace, core communication practices. Students will also analyze the ethical, professional, and organizational implications of AI in workplace communication, critically evaluating its impact on collaboration, adaptability, and overall effectiveness.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

COM 665 - Media and Strategic Communication
Credits: 4
This course explores the use of media in strategic communication toward the attainment of organizational objectives. Students will explore the impact of public relations, media outreach, marketing, branding, and leadership communication on both internal and external audiences in a variety of settings and sectors. The role and purpose of the organizational spokesperson, the function of the leader as the chief communicator, the strategic alignment of message and messenger, and effective use of technology in business communications will be discussed. This course provides knowledge of opportunities and pitfalls of the media environment, particularly in the digital, 24-hour news cycle age.
Attributes: Writing Intensive Course
Prerequisite(s): COM 590 with a minimum grade of D-.
Equivalent(s): COMM 602G
Grade Mode: Letter Grading

COM 670 - Advanced Visual Communication
Credits: 4
This course builds upon the foundation in analyzing and curating visual media established in COM 480 by focusing on how to compose, design, and deliver presentations using industry standard software (such as Microsoft PowerPoint) and web-based tools (such as Zoom, Screencast-o-matic and Prezi), among others. Equal time is devoted to each of the three stages of producing effective presentations- writing, technological design, and delivery-all of which contribute to achieving the intended purpose.
Prerequisite(s): COM 480 with a minimum grade of D- or COMM 543G with a minimum grade of D- or Has Accred Associate Deg with a score of WAIV or Has Accred Bachelor Deg with a score of WAIV.
Equivalent(s): COMM 615G
Grade Mode: Letter Grading

COM 675 - Organizational Communication
Credits: 4
Organizations are a fundamental component of human life: from schools, to workplaces, as well as volunteer and recreational groups, we all function within in organizations. This course examines the multi-level communication that occurs within organizations - among leaders, members, committees, teams, and departments - as vital to its success and longevity. Students analyze how organizations rely upon effective communication to anticipate and mitigate conflict. Students also devise strategies to utilize various forms of communication to contribute uniquely and meaningfully to organizations.
Attributes: Writing Intensive Course
Equivalent(s): COMM 620G
Grade Mode: Letter Grading

COM 680 - Trends in Digital and Social Media
Credits: 4
This course provides an opportunity for students to explore key technical, ethical, and experiential elements in contemporary digital and social media and integrate them into a project-based solution of the student's choosing. Topics are drawn from immediate trends and are interrogated for their effects on individuals, communities, society, and the world. Students also select a topic of their own for further study.
Attributes: Writing Intensive Course
Equivalent(s): COMM 601G
Grade Mode: Letter Grading

COM 685 - Web Development II
Credits: 4
Building on skills learned in Web Development I, students continue to gain an understanding of the terminology, development tools, and fundamental skills related to designing a successful website. Current software applications are learned as appropriate to the process.
Prerequisite(s): COM 504 with a minimum grade of D- or COMM 504G with a minimum grade of D-.
Equivalent(s): COMM 604G
Grade Mode: Letter Grading

COM 707 - Communication for Training and Performance Improvement
Credits: 2
The ability to write, design, speak, and record media for the purpose of training instruction draws upon specialized communication skills and knowledge of a systematic creative process. This course prepares students to contribute meaningfully to teams and organizations by introducing them to the foundational principles of instructional design as a form of communication, and then facilitates practice in the technical skills to produce media for the purpose of addressing a training or performance improvement need.
Prerequisite(s): COM 535 with a minimum grade of D- or COMM 505G with a minimum grade of D-.
Equivalent(s): COMM 607G
Grade Mode: Letter Grading

COM 710 - Managerial Communication
Credits: 4
Managerial roles increasingly emphasize negotiation, coaching, collaboration, and consensus building. Situational analysis and planning are key attributes of effective managerial communication. As such, this course develops and sharpens students' decision-making, team-building, and analytical problem-solving abilities. The course also embraces peer and instructor feedback as tools to refine students' impromptu and formal presentation skills in managerial contexts.
Attributes: Writing Intensive Course
Prerequisite(s): COM 590 with a minimum grade of D- or COMM 605G with a minimum grade of D-.
Equivalent(s): COMM 610G
Grade Mode: Letter Grading

COM 743 - Synthetic Media and the Construction of Reality
Credits: 4
In the past 25 years, electronic media, mobile devices, and algorithmically optimized information networks have intensified how humans have engaged with mediated information. This course examines the collateral effects of this phenomenon on our habits, norms, beliefs, and cognitive processing. Students will study the historical, political, and theoretical narrative that has led to questions about the construction of social worlds, the construct of reality, and the legitimacy of information. A special focus will be made in studying the implications of synthetic deepfake and AI-driven text generating systems in accelerating these effects.
Equivalent(s): COMM 643G
Grade Mode: Letter Grading

COM 765W - Strategic Communication
Credits: 4
In contrast to Organizational Communication, the study of Strategic Communication focuses on how organizations communicate with their external publics, to include vendors, clients, and shareholders, among others. This course surveys public relations, insofar as it explores how an organization crafts, maintains, and redefines its image, in times of success as well as crisis. Students practice producing reliable strategic writing in the form of press releases, newsletters, and brochures, with particular emphasis upon skills in instant response, clarifying and simplifying complex information, as well as considerations of privacy, ethics, and legality.
Attributes: Writing Intensive Course
Prerequisite(s): COM 675 with a minimum grade of D-.
Equivalent(s): COM 565, COMM 565G
Grade Mode: Letter Grading

COM 797 - Integrative Capstone: Project in Professional Communication
Credits: 4
This capstone course for the Professional Communication major builds on previous study in the field and provides an opportunity to apply learning in an in-depth project. Projects must employ applied research, demonstrate knowledge of communication theory, and integrate reflection on cultural and/or organizational dimensions of communication. Students synthesize their knowledge of theory and practice to develop and implement a project in their own area of professional interest. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): COMM 650G
Grade Mode: Letter Grading

COM 798 - Integrative Capstone: Project in Digital Communication Design
Credits: 4
The Capstone course for the Digital Communication Design major enables the student to apply what they have learned throughout their academic career within a project of their choosing. Students will propose, design, develop, and report on a project that touches upon each of the Programmatic Outcomes for their major and concentration to demonstrate their knowledge and proficiency. Students will work in partnership with faculty to create a project that meets the requirements, output, and format of Capstone-level research. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): COMM 651G
Grade Mode: Letter Grading

Communication Arts (CA)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CA 450 - Introduction to Public Speaking
Credits: 4
Theories of rhetoric applied to the practice of speech composition, oral performance, and critical evaluation. Focus on student speeches for a variety of situations and audiences. Not for credit if credit earned for CMN 500.
Equivalent(s): CMN 403, CMN 500
Grade Mode: Letter Grading

CA 500 - Media Writing
Credits: 4
An introduction to business, creative and freelance writing for a variety of media. Writing, editing and rewriting in areas such as video scripts, short magazine articles, audio scripts, ads, press releases, news, short one-act plays, blogs and more.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 501 - Internship/Communication in the Urban Community
Credits: 1-4
Field-based learning experiences. Connects students to the urban community and integrates their classroom education within a business or organizational setting. Students work under the direction of a faculty advisor and workplace supervisor to fulfill the obligations of the workplace internship plan and to complete individually-designed academic projects. Projects must be approved in advance by the faculty advisor. Open to matriculated students with a GPA of 2.50 or better and junior standing. Permission of instructor required. May be repeated, with 4 credits maximum accepted toward satisfaction of requirements for the CA major.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

CA 502 - Image and Sound
Credits: 4
Image and Sound is a foundation course in the aesthetics of motion picture and sound production. This course explores the aesthetic principles that are used to communicate stories, emotions and messages in popular media. Students will study film, television and new media and survey production methods. This is not a production course per se, but is particularly helpful to students interested in video and film production. No credit for students who have completed CA 444.
Attributes: FinePerformingArts(Discovery)
Equivalent(s): CA 444
Grade Mode: Letter Grading

CA 507 - Relational Violence
Credits: 4
This course explores relational violence and its impact on individuals, families, and communities. Topics include relational violence as a continuum, types of relational violence (domestic, gangs, hate crimes), causes of relational violence, PTSD, responding to relational violence, silencing, compassion fatigue, and restorative justice.
Prerequisite(s): CMN 457 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 508 - Conflict in Relational Communication
Credits: 4
Introduces communication theories relevant to the study of conflict interaction in interpersonal relationships. Considers interpersonal concerns contributing to conflict such as power, face-saving, and goals. Examines behaviors that affect our ability to resolve conflict, and strategies, such as mediation, to resolve conflict. Develops the ability to diagnose productive and destructive conflict patterns in relationships. The course is both theoretical and practical in orientation. A combination of lecture, discussion, case studies, and in-class group assignments are employed.
Prerequisite(s): CMN 457 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 512 - Screenwriting
Credits: 4
Examines the preproduction phase of moving image media, focusing especially on the art and business of writing for the screen. Covers the process of developing student work from original story idea to completed, first draft screenplay. Topics include script formats, narrative structure, plot development, characterization, style, and marketing strategies. Cannot receive credit if credit received for CA 512 Scriptwriting.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- and (CMN 455 with a minimum grade of D- or CMN 456 with a minimum grade of D-).
Grade Mode: Letter Grading

CA 514 - Fundamentals of Video Production
Credits: 4
Beginning electronic field production using digital video and nonlinear editing formats. Covers basic aesthetic principles and practices of video communication. Introduces techniques for effective image and sound recording in the field, fundamentals of shot and sequence construction, and basic postproduction practices on nonlinear editing systems. Preference given to CA majors.
Prerequisite(s): ENGL 401 with a minimum grade of D- and (CA 502 with a minimum grade of D- or CA 444 with a minimum grade of D-) and CMN 455 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 515 - Advanced Video Production
Credits: 4
Advanced electronic field production and post production using digital video and nonlinear editing formats. Emphasizes original student work of increasing conceptual, formal, and technical complexity that begins to incorporate a wider range of images, sounds, and editing techniques. Preference given to CA majors. May be repeated with permission.
Prerequisite(s): CA 514 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

CA 517 - Fundamentals of Audio Prod
Credits: 4
This course provides students with an introduction to the history, principles, and techniques of audio production. Through hands-on experience, class projects, and homework assignments, student learn how to use voice, music, writing, sound effects, and audio hardware and software to design sound and tell a story. This class will also look at the radio industry and how sound design is being used by a variety of industries.
Grade Mode: Letter Grading

CA 520 - Special Topics in Applied Communication
Credits: 1-4
New or specialized topics in applied communication not covered in regular course offerings. Topics vary; descriptions listing course content and any prerequisites are available during preregistration. May be repeated for credit if topics differ. Prerequisite requirements are contingent on topic.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

CA 522 - Graphic Design I
Credits: 4
Presents fundamentals of Graphic Design while touching on foundation art theories and vocabulary. Through examination and analysis of professional graphic design, students become familiar with the relationship between graphic design process, creative solutions and critical thinking. Students work with a variety of traditional and digital media, with an emphasis on the process of design, composition and typography. Class includes a significant amount of computer lab and creative studio time.
Grade Mode: Letter Grading

CA 523 - Graphic Design II
Credits: 4
Students explore the creative process that helps them communicate ideas and information to a target audience. Higher level, theoretical ideas related to communication, design and cognitive theories will be introduced. Students will engage in intermediate design projects through software and traditional media. Class includes a significant amount of computer lab and creative studio time.
Prerequisite(s): CA 522 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 527 - History of Film
Credits: 4
Historical analysis of the development of film in the U.S. and abroad from the end of World War II and the rise of TV to today's era of video streaming and digital cinema. Covers topics such as film and the cold war, the decline of the Hollywood studio system, major international stylistic movements, independent cinema, film distribution and exhibition trends, the impact of new technologies, globalization, and economic consolidation, among others.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

CA 531 - History and Organization of Advertising
Credits: 4
Examines the development of advertising in historical context, focusing on the evolving structure and function of advertising agencies, market research practices, advertising design, anthropological approaches to advertising and consumer culture, and contemporary policy issues.
Prerequisite(s): CMN 455 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 532 - Typography I
Credits: 4
Typography is the formal study of letterforms. Students gain perspective into this important field by starting with a focus on early visual communication, symbols, handwritten letterforms, calligraphy and the development of movable type. Students explore ways to categorize type into families and identify and define similarities and subtle differences in classical typefaces. Class discussions, projects, critiques and lectures focus of typography terminology, as well as the aesthetic discipline of using type effectively as designer.
Grade Mode: Letter Grading

CA 536 - LGBT Images and Perspectives
Credits: 4
This course explores the perspectives and images of lesbian, gay, bisexual, trans, and queer individuals, from antiquity through modern day. Topics include: history, aging, religion, the media, and the law.
Prerequisite(s): CMN 457 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 538 - Gender
Credits: 4
How gender is created, maintained, repaired, and transformed through communication in particular historical, cultural, and relational contexts. Examines a variety of topics including the relationship between sex and gender, language, cultural mythologies, identity, health care, sexuality, and strategies for resisting conventional gender definitions. May not be taken for credit if student has already taken CA 506: Gender.
Prerequisite(s): CMN 457 with a minimum grade of D-.
Equivalent(s): CA 506
Grade Mode: Letter Grading

CA 539 - Communicating in Families
Credits: 4
Explores the role of communication in the creation, maintenance, and transformation of family systems. Focus on how meanings of "family" are constructed through familial and popular discourses, and the consequences these communication practices have for lived experience.
Prerequisite(s): CMN 457 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 540 - Public Relations
Credits: 4
This course provides students with an overview of the field of public relations, including its history, ethics, and current practices. Will include case studies of major public relations issues that have occurred both historically and in recent years; individual and class projects that enable students to determine how best to plan for and respond to public relations issues; and quest practitioners who work in various fields, including business, government, the non-profit sector, and education.
Prerequisite(s): CMN 456 with a minimum grade of D- or CMN 455 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 542 - Social Media for Organizations and Business
Credits: 4
Focuses on the history, development and practical use of social media for organizational and business communications. A primary focus is on the latest social media tools and their use in developing social media campaigns. Hands-on student work is an important part of the course. Cannot receive credit if earned for CA 520 Social Media for Organizations and Business.
Prerequisite(s): ENGL 401 with a minimum grade of D- and (CMN 455 with a minimum grade of D- or CA 500 with a minimum grade of D-).
Grade Mode: Letter Grading

CA 550 - Special Topics in Communication Organization, History, and Policy
Credits: 1-4
New or specialized topics in the organization, history, and policy of communication practices not covered in regular course offerings. Topics vary; descriptions of course content and any prerequisites are available during preregistration. May be repeated if topics differ.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

CA 610 - Communication Technologies and Culture
Credits: 4
The role of communication technologies in shaping cultural meanings and human consciousness. Covers the work of Innis, McLuhan, Ong, Postman, Carey and others to understand the historical development of shifting communication technologies and patterns of culture from orality to computer communication. Also explores the dynamic between mass culture and sub-cultural appropriations of media forms and content. Students must complete two 500 level CA courses (excluding CA 501), at least one of which has CMN 455 as a prerequisite, prior to taking this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 612 - Narrative
Credits: 4
Considers the ways humans make sense of experience through the stories we construct within particular relational, cultural, and historical contexts. Explores a variety of topics including narrative conventions, canonical stories, subjectivity and reflexivity, the relationship between story and audience, space and time, memory and imagination, and narrative truth. Each student will conduct an original narrative research project. Students must complete two 500 level CA courses (excluding CA 501) prior to taking this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 457 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 615 - Film History/Theory and Method
Credits: 4
Intensive study of philosophical, rhetorical, and methodological issues in film history research. Examines a series of selected historical problems in the areas of social, aesthetic, industrial, and technological film history up to 1948 and reviews existing historiography on these problems. Focus is on original student research. Students must complete two 500 level CA courses (excluding CA 501), at least one of which has CMN 455 as a prerequisite, prior to taking this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 618 - Documentary
Credits: 4
Exploration of the historical development, ethics, funding, socio-cultural significance, and communication strategies of documentary film and video. May focus on a particular genre or genres. Students must complete two 500 level CA courses (excluding CA 501), at least one of which has CMN 455 as a prerequisite, prior to taking this course, unless granted instructor permission.
Attributes: Writing Intensive Course
Prerequisite(s): CMN 455 with a minimum grade of D-.
Grade Mode: Letter Grading

CA 720 - Seminar
Credits: 4
Intensive readings and research course in a highly focused area of study. Topics vary. Descriptions of course content and any prerequisites are available during preregistration. May be repeated if topics differ.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

CA 795 - Independent Study
Credits: 1-4
Advanced individual study under the direction of a faculty member. Content area and research project to be developed in consultation with faculty supervisor. May be repeated, with 4 credits maximum accepted toward satisfaction of requirements for the CA major.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Communication Sciences & Disorders (COMM)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

COMM 420 - Survey of Communication Disorders
Credits: 4
This course provides an introduction of Communication Sciences and Disorders (CSD) as it relates to the CSD undergraduate major and the professions of Speech-Language Pathology and Audiology. Students will learn about foundational knowledge of the speech and hearing mechanism, language development, normal communication processes, diagnoses, and treatment across different communication disorders and lifespans. Given the importance of communication, the course information can be applied to various human service careers.
Equivalent(s): COMM 520
Grade Mode: Letter Grading

COMM 504 - Basic Audiology
Credits: 4
This course provides an overview of the profession and practice of Audiology. Students will learn about the causes of hearing loss and the diagnostic process. The anatomy and physiology of the auditory system will be reviewed. The physical properties of sound will be studied, particularly as these relate to hearing loss.
Prerequisite(s): COMM 521 with a minimum grade of C and COMM 636 with a minimum grade of C.
Equivalent(s): COMM 704
Grade Mode: Letter Grading

COMM 521 - Anatomy and Physiology of the Speech and Hearing Mechanisms
Credits: 4
This course provides the fundamentals of anatomy, physiology, neurology, and function of the mechanisms associated with speech, language, swallowing, and hearing. Multi-media platforms, class and group discussions, and problem-based learning will be utilized. Students will gain the essential foundation and knowledge for assessment, treatment, and management related to communication and swallow disorders.
Prerequisite(s): BMS 507 with a minimum grade of D-.
Grade Mode: Letter Grading

COMM 522 - Language Acquisition
Credits: 4
This course is an introduction to typical language acquisition. The progression of language development is examined within a linguistic framework, phonology, morphology, syntax, semantics, and pragmatics. Theories of language acquisition overviewed.
Prerequisite(s): COMM 524 with a minimum grade of C and (LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-).
Grade Mode: Letter Grading

COMM 524 - Clinical Phonetics
Credits: 4
This course focuses on the application of the International Phonetic Alphabet to describe adult, child, and disordered speech production. Students will learn to use broad and narrow transcriptions of speech. Information on basic speech science, acoustic and articulatory phonetics, and acoustic analysis of speech production will be provided.
Prerequisite(s): LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-.
Grade Mode: Letter Grading

COMM 636 - Speech and Hearing Science
Credits: 4
This course provides the student with information on the understanding and application of waveform analysis (acoustic and aerodynamic), basic processing of auditory information, and physiological and cultural bases of hearing and speech production/perception.
Prerequisite(s): COMM 521 with a minimum grade of C.
Grade Mode: Letter Grading

COMM 705 - Introduction to Aural Rehabilitation
Credits: 4
This course provides an overview of auditory perception and the re(h)abilitive process for individuals with hearing loss and auditory disorders. The principles of intervention, communication options, and vocational/educational resources will be studied. Students will learn about amplification systems and other technology used to improve audition, including hearing aids and cochlear implants.
Prerequisite(s): COMM 504 with a minimum grade of D-.
Grade Mode: Letter Grading

COMM 707 - Language Science
Credits: 4
This course explores the cognitive and psychological processes involved in understanding and producing language, with applications to communication sciences and disorders. Students examine how individuals access and comprehend words, construct and interpret sentences, manage ambiguity, and use linguistic and extralinguistic context to derive meaning in real time. The course also investigates the influence of identity, dialect, and communication setting on language processing and language use. Through readings, discussion, and analysis of experimental research, students gain insight into how language processing reveals the workings of the human mind and informs both language science and clinical practice. Clinical translation is integrated throughout, consistent with ASHA Standards.
Prerequisite(s): LING 405 with a minimum grade of D- and PSYC 401 with a minimum grade of D-.
Grade Mode: Letter Grading

COMM 723 - Observation Skills in Speech-Language Pathology
Credits: 2
This course is designed to provide opportunities to observe clients with communication disorders. Observations will include both assessment and intervention techniques. Students successfully completing this course will accrue observation hours that can be applied to the requirement for graduate studies.
Co-requisite: COMM 741
Prerequisite(s): COMM 522 with a minimum grade of D- and COMM 524 with a minimum grade of D-.
Grade Mode: Credit/Fail Grading

COMM 724 - Senior Capstone
Credits: 4
This course is designed to provide undergraduate students with a culminating learning experience in their Senior year. The course focuses on ethical principles in healthcare, understanding how bias and noise can lead to errors in decision making, and learning to write peer review critiques of articles in CSD. The class will explore how to identify sources of error, how to measure them, and how to reduce them through systematic audits of noise and bias, using case studies and examples from CSD (both audiology and speech-language pathology). This information is intended to provide you with. The course is designed to provide foundational information to prepare students for a career as an Audiologist or a Speech-Language Pathologist, graduate school, or other healthcare related activities. Students completing this course will satisfy the writing intensive within major requirement.
Attributes: Writing Intensive Course
Prerequisite(s): COMM 420 with a minimum grade of C and COMM 522 with a minimum grade of C and (COMM 504 with a minimum grade of C or COMM 604 with a minimum grade of C).
Equivalent(s): COMM 635
Grade Mode: Letter Grading

COMM 740 - Treatment of Adults with Acquired Brain Injury
Credits: 1-4
This course provides a "hands-on" interdisciplinary experience. Students will acquire clinical skills and professional competence in a community-based day program. This experience includes assisting adults with acquired brain injury to meet their physical, emotional, cognitive-linguistic, social, spiritual, recreational, and vocational needs.
Grade Mode: Letter Grading

COMM 741 - Pediatric Speech and Language Disorders: Foundations in Clinical Decision-Making
Credits: 4
This course provides foundational knowledge related to pediatric speech and language disorders, as well as exposure to principles of assessment and treatment in these populations. Students extend their knowledge of language development in the areas of morphology, syntax, semantics, and pragmatics as well as their knowledge of how the speech mechanism works, to learn about communication breakdowns that may occur during childhood.
Prerequisite(s): COMM 522 with a minimum grade of D- and COMM 524 with a minimum grade of D-.
Equivalent(s): COMM 631, COMM 731
Grade Mode: Letter Grading

COMM 742 - Neurological Foundations of Communication Disorders Across the Lifespan
Credits: 4
This course provides the neurologic bases for understanding the communication disorders from birth to geriatrics, with an emphasis on motor, linguistic, and cognitive communication disorders. Introduction to common approaches to treatment for these disorders is also provided.
Prerequisite(s): COMM 504 with a minimum grade of C and COMM 521 with a minimum grade of D- and COMM 636 with a minimum grade of D- and KIN 706 with a minimum grade of D- and KIN 707 with a minimum grade of D-.
Equivalent(s): COMM 630
Grade Mode: Letter Grading

COMM 744 - Seminar in Advanced Child Language Acquisition
Credits: 3
Young infants and children are in a process of continual learning. This course takes an advanced and interactive approach to understanding child language acquisition, exploring specific aspects of early language development as well as the interaction of different developmental processes. We will delve deeper into how language acquisition interacts with cognitive development, prosodic development and assessment, multilingual and multicultural populations, and populations that are developing along a different path.
Prerequisite(s): COMM 522 with a minimum grade of D-.
Equivalent(s): COMM 844
Grade Mode: Letter Grading

COMM 795 - Independent Study
Credits: 1-8
Individual or group projects involving directed study of an area of communication sciences and disorders that students wish to explore in greater depth than is covered in the required curriculum.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

COMM 798 - Special Topics
Credits: 1-4
New or specialized topics not covered in regular course offerings. Special fee on some topics.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading
Special Fee: Yes

COMM 799 - Honors Thesis
Credits: 1-4
The purpose of this course is to complete a capstone project in the communication sciences and disorders, culminating students' experiences that introduce them to the research process in CSD.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

Community & Environmental Planning (CEP)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CEP 415 - Community Development Perspectives
Credits: 4
This course introduces students to a range of community development and environmental issues facing communities as they undergo social, economic, and environmental change. Through class discussion and examination of case studies, the course describes basic principles and processes of community development, planning and policy formulation. Community and environmental topics covered in the course include affordable housing, rural development, economic development, local food systems, community health care, neighborhood revitalization, community infrastructure, disaster recovery, environmental stewardship, resilience and climate change, civic engagement and social capital.
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

CEP 508 - Applied Community Development
Credits: 4
Students work in small teams with an actual public or nonprofit organization on a community development topic of interest to that organization. Students assist the organization to identify community development policy needs and problems, assess requirements and resources, and analyze pertinent primary and secondary economic, social, political, and physical data on the organization's community development topic. Based on this analysis, students make recommendations to the organization for new or improved community policies, programs or processes.
Prerequisite(s): CEP 415 with a minimum grade of D- or CEP 672 with a minimum grade of D- or TOUR 510 with a minimum grade of D-.
Grade Mode: Letter Grading

CEP 614 - Fundamentals of Planning
Credits: 4
This course introduces the community planning process in non-metropolitan and metropolitan communities through the practical application of planning techniques. The course covers key planning topics such as data gathering and analysis, the comprehensive plan, zoning regulations, urban, suburban and rural design, and citizen participation. The course also covers community planning components such as: housing, jobs and economic development, neighborhoods, recreation, transportation and community infrastructure, environment and sustainability, and the administrative structure for planning.
Attributes: Writing Intensive Course
Prerequisite(s): (EREC 411 with a minimum grade of D- or NR 411 with a minimum grade of D- or ECON 402 with a minimum grade of D-) and CEP 415 with a minimum grade of D-.
Grade Mode: Letter Grading

CEP 627 - Community Economics
Credits: 4
Economic factors affecting community and local government decisions. Emphasizes use of economic theory for decision making and community problem solving.
Prerequisite(s): EREC 411 with a minimum grade of D- or NR 411 with a minimum grade of D-.
Equivalent(s): CD 627, EREC 627, RECO 627
Grade Mode: Letter Grading

CEP 672 - Fundamentals of Real Estate
Credits: 4
This course covers timely subjects in National and regional real estate, such as types of property ownership, easements, financing, contracts, appraisal, brokerage, property listings, commissions, fair housing, and property management. The goal of this class is to prepare students to pass the New Hampshire Real Estate Sales Agent License Exam and/or be knowledgeable real estate investors.
Grade Mode: Letter Grading

CEP 673 - Green Real Estate
Credits: 4
This class covers issues related to existing and new real estate development with respect to history, law (state statutes and federal legislation), economics, and technology. The course looks at impacts of green development from an individual building level, and out to regional and global levels. We look at common problems and solutions, review case studies, and discuss emerging trends in "green development."
Grade Mode: Letter Grading

CEP 777 - Topics in Community Planning
Credits: 4
This capstone course focuses on advanced treatment of the concepts and tools required for effective local and regional planning and community development. Students select a community and environmental planning or development topic of their choice to focus on throughout the semester. The student gathers, evaluates and writes about information related to their chosen topic and assesses and makes recommendations for effective planning and policy approaches. At the conclusion of this course, the student has built substantive expertise in their chosen topic area, as well as local information collection, planning and community policy implementation processes.
Attributes: Writing Intensive Course
Prerequisite(s): CEP 614 with a minimum grade of D-.
Grade Mode: Letter Grading

CEP 794 - Community and Environmental Planning Internship
Credits: 4-12
Fieldwork in a planning office for student's professional development. Student must be supervised by a qualified planner or faculty-approved supervisor throughout the internship and remain in consultation with a faculty advisor. A Memorandum of Understanding between the student, the internship supervisor, and the faculty advisor, as well as midterm and final written reports are required. May be taken for 4 credits with 150 hours of internship up to a maximum of 12 credits for 450 hours of internship.
Repeat Rule: May be repeated for a maximum of 12 credits.
Equivalent(s): CD 794
Grade Mode: Credit/Fail Grading

CEP 795 - Investigations
Credits: 2-4
Special assignments in readings, investigations, or field problems, or teaching experience. May be repeated.
Equivalent(s): CD 795, CD 795W, CEP 795W
Grade Mode: Letter Grading

Community Leadership (CSL)

No courses are currently active in the course inventory for this subject prefix.

Computer Science (CS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CS 400 - Introduction to Computing
Credits: 2
Introduces students to the available computing-related majors and a variety of topics foundational to success in computing-related fields. Coverage includes ethics, skills, and knowledge applicable to a broad range of computing disciplines.
Grade Mode: Letter Grading

CS 408 - Living in a Networked World: The Good, the Bad, and the Ugly
Credits: 4
The objective of this course is to explore the implications of living in a networked world. The course surveys the fundamental technologies and practices that make up the Internet and then ask the student to examine the ramifications of using the technologies. Users of the technologies should understand the technology in order to make educated decisions about how to use it safely and effectively. Students have the opportunity to self-publish by using various current technologies including blogs, discussion boards, email and creating web pages using xhtml.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

CS 410C - Introduction to Scientific Programming/C
Credits: 0 or 4
Introduces the concepts and techniques of computer programming. Particular emphasis on computer programming as a problem-solving technique in science and engineering applications. Good programming style is stressed. Significant out-of-class programming required.
Equivalent(s): CS 410P, CS 415
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

CS 410P - Introduction to Scientific Programming/Python
Credits: 0 or 4
Introduces the concepts and techniques of computer programming. Particular emphasis on computer programming as a problem-solving technique in science and engineering applications. Good programming style is stressed. Significant out-of-class programming required. Not open to students who have completed CS 415 or the equivalent.
Equivalent(s): CS 410C, CS 415
Grade Mode: Letter Grading

CS 415 - Introduction to Computer Science I
Credits: 0 or 4
Theory and practice of computer science. Algorithm development and analysis; data abstraction techniques; elementary data structures; dynamic memory manipulation; debugging; and program design issues. Computer systems and applications. Intended for CS majors.
Equivalent(s): CS 410C, CS 410P
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

CS 416 - Introduction to Computer Science II
Credits: 0 or 4
Theory and practice of computer science. Algorithm development and analysis; data abstraction techniques; elementary data structures; dynamic memory manipulation; debugging; and program design issues. Computer systems and applications. Intended for CS majors.
Prerequisite(s): CS 410C with a minimum grade of D- or CS 410P with a minimum grade of D- or CS 415 with a minimum grade of D-.
Equivalent(s): CS 417
Grade Mode: Letter Grading

CS 417 - From Programs to Computer Science
Credits: 0 or 4
Programming techniques for students with programming experience from an introductory programming course. Covers basic algorithm analysis. Topics include basics of classes, inheritance, and data abstraction; linear data structures (vectors, lists, stacks and queues); trees and simple graphs; hash tables; sorting and searching; recursion; and basic graph traversal algorithms. Numerous labs and programming assignments build skills in planning, problem solving, and debugging: this is a hands on course.
Prerequisite(s): CS 410P with a minimum grade of C- or CS 410C with a minimum grade of C- or CS 415 with a minimum grade of C-.
Equivalent(s): CS 416
Grade Mode: Letter Grading

CS 419 - Computer Science for Engineers and Scientists
Credits: 4
This course provides an accelerated coverage of programming techniques for students with programming experience from an introductory programming course. Topics covered include: basics of classes, inheritance, and data abstraction; linear data structures (vectors, lists, stacks, and queues); trees and simple graphs; hash tables; sorting and searching; and recursion. Students will learn basic algorithm analysis. Numerous labs and programming assignments will build skills in planning, problem solving, and debugging: this is a hands-on course.
Prerequisite(s): CS 410C with a minimum grade of D-.
Grade Mode: Letter Grading

CS 420 - Foundations of Programming for Digital Systems
Credits: 0 or 4
A systems-oriented introduction to C, with an emphasis on low-level operations, memory management, and debugging. Foundational digital systems concepts and methods will be introduced, including Boolean algebra, basic logic gates, number systems & conversions, integer representation, and theoretical aspects of combinational and sequential logic. Aspects of effective programming such as incremental development, appropriate structure and commenting, and basic testing will be stressed.
Prerequisite(s): CS 410C with a minimum grade of C- or CS 410P with a minimum grade of C- or CS 414 with a minimum grade of C- or CS 415 with a minimum grade of C-.
Grade Mode: Letter Grading

CS 450 - AI and the World
Credits: 4
This course is a nontechnical introduction to Artificial Intelligence (AI) as it exists in the modern world, focusing on machine learning, neural networks, and generative AI models such as ChatGPT and its contemporaries. The course covers the foundations of how these models work, applications and practical use of generative AI models, and the current limitations and future of AI. Students will emerge from the course better prepared to thrive in an increasingly AI-affected world, as well as to further their AI skills if they so choose. This is a discovery course in the Environment, Technology and Society (ETS) category, and is meant for everyone, requiring no technical background or other prerequisites. The coursework chiefly consists of classroom activities, readings, and written responses. Many course assignments will ask students to envision the application of varying aspects of AI to their own major or field of interest, and the implications and ethical considerations thereof.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

CS 457 - Introduction to Data Science and Analytics
Credits: 4
An introduction to data science and analytics. Overview of the use of analytics by industry, government, and nongovernmental organizations. Impact of analytics on society, ethical use of analytics. Methods of data generation, data management, data cleaning, and data preparation, with a focus on visual and exploratory analysis. Project-based, with an emphasis on collaborative, experiential learning. Design and implementation of programs, use of statistical software.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): DATA 557
Grade Mode: Letter Grading

CS 501 - Professional Ethics and Communication in Technology-related Fields
Credits: 4
A mixed lecture/seminar course intended to improve both reasoning and ability to communicate effectively in front of an audience. Students learn basic forms of ethical argument, they read about ethical situations in which technology and technology professions play a key role, and they participate in student-led discussions about the reading. Students also make oral presentations about both ethical and technical topics, and evaluate each other's presentations in order to improve their sense for what makes a good presentation.
Attributes: Environment,TechSociety(Disc); Inquiry (Discovery)
Prerequisite(s): ENGL 401 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 515 - Data Structures and Introduction to Algorithms
Credits: 0 or 4
Reviews basic data structures. Covers the mechanics and relative efficiencies of advanced data structures. Students will implement several data structures such as AVL trees, heaps, hash tables, and adjacency lists. Discusses abstract data types such as maps, priority queues, and graphs. Introduction to algorithm analysis, sorting algorithms, and graph algorithms.
Prerequisite(s): CS 416 with a minimum grade of C- or CS 417 with a minimum grade of C-.
Grade Mode: Letter Grading

CS 518 - Introduction to Software Engineering
Credits: 0 or 4
Study of software development practices and processes in the following areas: software life cycle; system validation and verification; development pipeline; cloud infrastructures; virtual machines, and containers; logging, instrumentation, and performance; fundamental security concepts. Experience working in groups. Restricted to students not in Senior Standing.
Prerequisite(s): CS 416 with a minimum grade of D- or CS 417 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 520 - Computer Organization and System-Level Programming
Credits: 0 or 4
Study software/hardware interaction, understand data and program representation. Topics include fundamentals of computer organization, CPU, memory, registers, addressing modes, instruction sets, assemblers, linkers, concurrency, memory hierarchy and memory management.
Prerequisite(s): CS 420 with a minimum grade of C- and CS 515 with a minimum grade of C-.
Grade Mode: Letter Grading

CS 527 - Fundamentals of Cybersecurity
Credits: 4
An entry-level introduction to a wide range of fundamental cybersecurity topics: authentication, authorization, auditing, cryptography, human element, network security, OS security, mobile & IoT security. The emphasis is to explain basic concepts with real world examples.
Prerequisite(s): CS 415 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 550 - Foundations of Machine Learning
Credits: 4
The course introduces fundamental methods in machine learning and artificial intelligence. Students will understand and appreciate the main challenges in building and using classical and contemporary machine learning models, including generative artificial intelligence. Throughout the course, students will gain hands on experience applying theoretical concepts to concrete problems. The course requires prior programming experience in a scripting language such as Python, R, Julia, or MATLAB.
Prerequisite(s): (ADMN 510 with a minimum grade of D- or BIOL 528 with a minimum grade of D- or BUS 430 with a minimum grade of D- or HMP 540 with a minimum grade of D- or MATH 439 with a minimum grade of D- or MATH 539 with a minimum grade of D- or MATH 540 with a minimum grade of D- or MATH 644 with a minimum grade of D- or PSYC 402 with a minimum grade of D-) and (MATH 422 with a minimum grade of D- or MATH 424A with a minimum grade of D- or MATH 424B with a minimum grade of D- or MATH 425 with a minimum grade of D-).
Mutual Exclusion: No credit for students who have taken CMPL 572.
Grade Mode: Letter Grading

CS 619 - Introduction to Object-Oriented Design and Development
Credits: 4
Principles of problem analysis and software design applied to the development cycle of a software system (i.e. from system requirements specification to design, implementation, and system test). Design and implementation using object-oriented principles, patterns, and tools. Experience in understanding and debugging software systems. Experience in working in groups.
Prerequisite(s): CS 515 with a minimum grade of C- and CS 518 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 620 - Operating System Fundamentals
Credits: 4
Introduces operating system concepts and design. Process and memory management; scheduling; file systems; storage devices; inter-process communication.
Prerequisite(s): CS 520 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

CS 659 - Introduction to the Theory of Computation
Credits: 4
Review of sets, relations, and languages. Induction and diagonalization. Finite automata, context-free languages, pushdown automata. Basic complexity theory.
Prerequisite(s): MATH 531 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 674 - Fundamentals of Statistical Learning I
Credits: 4
A first course in statistical learning. Supervised learning models including linear models and CART models. Model assessment and scoring methods, including cross-validation. Regularization and model tuning. Unsupervised learning models including k-means clustering. Statistical software will be used, and programming required.
Prerequisite(s): (MATH 539 with a minimum grade of C- or MATH 644 with a minimum grade of C-) and CS 415 with a minimum grade of C-.
Equivalent(s): DATA 674
Grade Mode: Letter Grading

CS 675 - Fundamentals of Statistical Learning II
Credits: 4
A second course in statistical learning. Supervised learning models includes regression trees, bagging, and random forests. Model assessment and scoring methods, including cross-validation. Regularization and model tuning. An introduction to neural networks including convolutional and recurrent networks. Unsupervised learning models including Principal Component Analysis. Statistical software will be used, and programming required.
Prerequisite(s): CS 674 with a minimum grade of C-.
Equivalent(s): DATA 675
Grade Mode: Letter Grading

CS 696 - Independent Study
Credits: 1-6
Individual projects developed and conducted under the supervision of a faculty member.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): CS 696W
Grade Mode: Letter Grading

CS 696W - Independent Study
Credits: 1-6
Individual projects developed and conducted under the supervision of a faculty member.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 1 time.
Equivalent(s): CS 696
Grade Mode: Letter Grading

CS 699 - Internship
Credits: 1
Provides the opportunity to apply academic experience in settings associated with future professional employment. A written proposal for the internship must be approved by the instructor. The proposal must specify what the student will learn from the internship, why the student is properly prepared for the internship and what supervision is available during the internship. A mid-semester report and final report are required. Prereq: permission.
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 3 times.
Grade Mode: Credit/Fail Grading

CS 712 - Compiler Design
Credits: 4
Formal languages and formal techniques for syntax analysis and parsing; organization of the compiler and its data structures; code generation. LL and LR parsing; automatic generation of scanners and parsers from high level descriptions. Implementation of features from imperative and object-oriented languages. Students required to design and implement a compiler for a simple language.
Prerequisite(s): CS 520 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 720 - Systems Programming
Credits: 4
Study and simulation of various types of systems that include assemblers, linkers, memory management, concurrency and other resource management techniques.
Prerequisite(s): CS 520 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 722 - Cloud Computing Systems
Credits: 4
The course covers a variety of topics in cloud computing systems, or more precisely, distributed systems that enable modern cloud computing. The topics include virtualization and its impact on configuration management. The course also covers the latest advancements in cloud computing/systems, IoT, edge, and fog computing.
Prerequisite(s): CS 620 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 723 - Performance Evaluation of Computer Systems
Credits: 4
Introduces the main concepts, techniques, and tools needed to evaluate the performance of computer systems under various configurations and workloads. The techniques allow one to perform capacity planning based on quality of service requirements of users and workload characteristics. Course is mainly based on the use of analytic queuing network models of computers systems. The performance techniques are applied to study the performance of centralized, distributed, parallel, and client/server systems. The course also discusses performance measuring tools for operating systems such as Unix and Windows NT.
Prerequisite(s): CS 620 with a minimum grade of D- and (MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-).
Grade Mode: Letter Grading

CS 725 - Computer Networks
Credits: 4
Introduction to fundamental concepts of computer networks and exploration of widely-used networking technologies. Topics include principles of congestion and error control; network routing; local, wireless and access networks; application protocol design; and network programming. In-depth discussion of the Internet suite of protocols.
Prerequisite(s): CS 520 with a minimum grade of D-.
Equivalent(s): IT 725
Grade Mode: Letter Grading

CS 727 - Software Security
Credits: 4
Mechanisms and implementation of techniques in software security. Various fundamental security topics include cryptography, access control, protocols, software vulnerabilities, and reverse engineering.
Prerequisite(s): CS 520 with a minimum grade of C- and CS 527 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 730 - Introduction to Artificial Intelligence
Credits: 4
In-depth introduction to artificial intelligence, concentrating on aspects of intelligent problem-solving. Topics include situated agents, advanced search techniques, knowledge representation, logical reasoning techniques, reasoning under uncertainty, advanced planning and control, and learning.
Prerequisite(s): CS 515 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 733 - Mobile Robotics
Credits: 4
An introduction to the foundational theory and practices in mobile robotics. Topics include Kinematics of wheeled mobile robots, Sensors for mobile robots, Robot navigation and perception, Robot vision, Localization and mapping of mobile robots. Hands-on experience directed towards implementation with a real robot. Programming course required prior to taking this course.
Grade Mode: Letter Grading

CS 735 - Introduction to Parallel and Distributed Programming
Credits: 4
Programming with multiple processes and threads on distributed and parallel computer systems. Introduces programming tools and techniques for building applications on such platforms. Course requirements consist primarily of programming assignments.
Prerequisite(s): CS 761 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 745 - Formal Specifications and Verification of Software Systems
Credits: 4
Course focuses on the formal specification and verification of reactive systems, most notably concurrent and distributed systems. Topics relevant to these systems, such as non-determinism, safety and liveness properties, asynchronous communication or compositional reasoning, as discussed. We rely on a notation (TLA+, the Temporal Logic of Actions) and a support tool (TLC, the TLA+ Model Checker).
Prerequisite(s): CS 520 with a minimum grade of D- and CS 659 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 750 - Machine Learning
Credits: 4
The course covers machine learning methods and their applications. Students will gain an in-depth understanding of when and why machine learning is effective and how to apply it successfully. The course will study foundational machine learning models to build intuition and then explore contemporary machine learning methods. Students will use a scripting language to gain hands-on experience with real-world datasets. The course requires prior programming experience in a scripting language such as Python, R, Julia, or MATLAB. It also requires some familiarity with linear methods in the form of an introductory linear algebra or linear models course.
Prerequisite(s): CS 550 with a minimum grade of D- or MATH 525 with a minimum grade of D- or MATH 527 with a minimum grade of D- or MATH 545 with a minimum grade of D- or MATH 645 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

CS 751 - Reinforcement Learning
Credits: 4
Reinforcement learning studies how agents can learn to act to achieve goals in complex, stochastic environments. This course introduces students to fundamental theoretical concepts of reinforcement learning, standard algorithms, and practical techniques. In addition to theoretical topics, the course involves implementing basic algorithms in a high-level programming language.
Prerequisite(s): (CS 415 with a minimum grade of D- or CS 410P with a minimum grade of D-) and (MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-).
Grade Mode: Letter Grading

CS 752 - Foundations of Neural Networks
Credits: 4
Neural networks are a class of machine learning models which have recently revolutionized many applied machine learning domains such as natural language understanding, image/video processing, bioinformatics, time series analysis. This course teaches students to develop new neural network architectures from scratch and customize them. The course covers all necessary foundations of neural networks including gradient descent optimization and vector calculus. Students will learn how to design models using idioms such as observed variables, latent variables, gate variables and different functions as well as a wide range of state-of-the-art architectures as design examples.
Prerequisite(s): CS 515 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 753 - Information Retrieval and Generation Systems
Credits: 4
Fundamental algorithms and techniques for text processing and text-based information retrieval, synthesis, and generation systems. Topics include how to build an end-to-end information access system, such as a Web search engine or a chat agent.
Attributes: Writing Intensive Course
Prerequisite(s): CS 515 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 755 - Computer Vision
Credits: 4
Studying techniques that make a machine 'see' and 'understand' the world in a human-like fashion. The course discusses the theory behind common computer vision techniques and trains students on designing their own algorithms for understanding image or video.
Prerequisite(s): MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 757 - Mathematical Optimization for Applications
Credits: 4
This course introduces the foundations of mathematical optimization and reinforces them via applications. The content includes convex optimization, first and second-order methods, constrained problems, duality, linear and quadratic programming, as well as discrete and non-convex optimization. Applications will focus on machine learning methods but also include problems from engineering and operations research. Programming proficiency in MATLAB, R, Java, C, Python, or equivalent required.
Prerequisite(s): MATH 426 with a minimum grade of D-.
Equivalent(s): MATH 757
Grade Mode: Letter Grading

CS 758 - Algorithms
Credits: 4
An introduction to important concepts in the design and analysis of algorithms and data structures, including implementation, complexity analysis, and proofs of correctness.
Prerequisite(s): CS 420 with a minimum grade of C- and CS 515 with a minimum grade of C- and CS 659 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 759 - Natural Language Processing
Credits: 4
This class covers natural language processing, including both methods and well-known applications. Methods discussed will range from classical probabilistic methods such as Naive Bayes and Hidden Markov Models, to contemporary neural network methods, including word vector models, recurrent neural networks, and Transformer-based models. Applications discussed will include text classification, machine translation, and conversation systems.
Prerequisite(s): CS 515 with a minimum grade of D- and (MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-).
Grade Mode: Letter Grading

CS 760 - Human-Computer Interaction
Credits: 4
This course is a broad introduction to designing, prototyping, and evaluating user interfaces in the context of Human-Computer Interaction (HCI) theory and practice. Additional topics may include the history of computer interfaces, theories of human cognition and perception, observational techniques, and experimental design. Coursework includes lectures, programming assignments, writing assignments, class presentations, and group projects.
Attributes: Writing Intensive Course
Prerequisite(s): CS 416 with a minimum grade of C- or CS 417 with a minimum grade of C-.
Equivalent(s): IT 760W
Mutual Exclusion: No credit for students who have taken CMPL 622.
Grade Mode: Letter Grading

CS 761 - Programming Language Concepts and Features
Credits: 4
Explores the main features of modern, high-level, general-purpose programming languages from the user (programmer) standpoint. Students learn how specific features of programming languages can be used effectively in solving programming problems. The course is also an opportunity to use paradigms that expand on simple imperative programming, such as object-oriented, functional and concurrent programming. Some knowledge of Java required.
Prerequisite(s): CS 520 with a minimum grade of C-.
Equivalent(s): CS 671
Grade Mode: Letter Grading

CS 770 - Computer Graphics
Credits: 4
Input-output and representation of pictures from hardware and software points of view; interactive techniques and their applications; three-dimensional image synthesis techniques and their applications.
Prerequisite(s): CS 515 with a minimum grade of C- and CS 520 with a minimum grade of C-.
Grade Mode: Letter Grading

CS 775 - Database Systems
Credits: 4
Introduction to database management systems --- design, implementation, and usage --- with focus on the relational model. Data description, manipulation, and query language in the context of MySQL. Schema design and normalization; indexes, transaction processing. Web access of databases (PHP); overview of XML and noSQL systems.
Prerequisite(s): CS 515 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken IT 775.
Grade Mode: Letter Grading

CS 780 - Topics
Credits: 1-4
Material not normally covered in regular course offerings. May be repeated barring duplication of subject.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

CS 781 - Data Science for Knowledge Graphs and Text
Credits: 4
This course covers advanced text processing and machine learning algorithms and techniques for data science with knowledge graph and text data. This includes a wide range of algorithms for neural networks, machine learning, graph processing, text processing, and information retrieval with a focus of gaining insights into the knowledge stored in data. This an implementation-intensive research-oriented seminar, where a particular data science application will be developed by reading research publication and implementing a software prototype.
Prerequisite(s): CS 752 with a minimum grade of B- or CS 753 with a minimum grade of B- or CS 759 with a minimum grade of B-.
Grade Mode: Letter Grading

CS 791 - Senior Project I
Credits: 2
First semester of the capstone design experience. Modern software engineering practices and tools are surveyed and applied in team projects. Students begin development on software projects proposed by faculty or external sponsors, including initial stages of design, implementation, and documentation, with an interim presentation of progress expected toward the end of the semester. Principles of security, testability, and maintainability are stressed.
Prerequisite(s): CS 520 with a minimum grade of C- and ((CS 619 with a minimum grade of D- and CS 620 with a minimum grade of D-) or (CS 620 with a minimum grade of D- and (CS 727 with a minimum grade of D- or IT 666 with a minimum grade of D-))).
Grade Mode: Letter Grading

CS 792 - Senior Project II
Credits: 2
Continuation of CS 791: Senior Project I. Students complete the project by implementing their design. Students work in teams. Successful completion of this course fulfills the Capstone Experience requirement for Computer Science majors.
Attributes: Writing Intensive Course
Prerequisite(s): CS 791 with a minimum grade of D-.
Grade Mode: Letter Grading

CS 799 - Thesis
Credits: 1-5
Students work under the direction of a faculty sponsor to plan and carry out independent research resulting in a written thesis. Required for honors-in-major. Additional CS 600-level course required. Minimum GPA should be 3.4 or higher.
Attributes: Writing Intensive Course
Prerequisite(s): CS 520 with a minimum grade of C- and CS 619 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Computer/Information Tech (CMPL)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CMPL 402 - Excel
Credits: 2
A comprehensive examination of spreadsheet software. Students will build a variety of spreadsheets using simple and complex formulas, functions, graphics, database features, sorts, linkages within spreadsheet and between spreadsheets, and macros. Basic Algebra and knowledge of computer operating system required. This course is valuable for all Business students and Computer Science Students. It provides competency and fluency in the standard software used for business analysis and as a link between large computer software systems and the end user.
Equivalent(s): CMPL 502G, MGMT 502G
Grade Mode: Letter Grading

CMPL 415 - Programming Fundamentals
Credits: 4
The course is designed to provide students with a sound background in structured programming logic and design. These foundational concepts can be applied regardless of which programming languages a student eventually uses to write programs. The demonstration language for programming concepts will be C++. The course covers the key mathematical and logical constructs that are the basis of much programming. Topics include the software development life cycle, particularly the programming phase, structured programming techniques, problem-solving and algorithm development, decision control structures, including selection (IF/CASE) and repetition (looping) structures, variables and arrays, and data structures. Proficiency in Excel is necessary for success in this course.
Prerequisite(s): MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D-.
Equivalent(s): CMPL 515G
Grade Mode: Letter Grading

CMPL 512 - Advanced Software Tools
Credits: 4
This is a project-oriented software applications course to help the student gain competency with advanced features of office productivity software and to introduce more advanced database application concepts. NOTE: Excel is recommended for success in this course.
Equivalent(s): CMPL 612G
Grade Mode: Letter Grading

CMPL 525 - Foundations of Cybersecurity
Credits: 4
This course addresses the foundations of cybersecurity, including threats and vulnerabilities as well as the tools, technologies, and strategies used to manage those threats and vulnerabilities.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): CMPL 525G
Grade Mode: Letter Grading

CMPL 530 - Python Programming I
Credits: 4
In this introductory programming with Python course, students will have the opportunity to learn about data types, control flow, object-oriented programming, and graphical user interface-driven applications. The examples and problems used in this course are drawn from diverse areas such as text processing, simple graphics creation, and image manipulation. This course will explore the large standard library of Python 3, which supports many common programming tasks.
Prerequisite(s): CMPL 415 with a minimum grade of D- or CMPL 515G with a minimum grade of D-.
Equivalent(s): CMPL 530G
Grade Mode: Letter Grading

CMPL 540 - Best Practices in Website Design
Credits: 2
This hands-on course outlines the fundamentals of web design. Students consider ethical use of information and best practices when creating websites using free web page design programs. Working with a basic design program, students explore layout, graphics, text, color, links, tables, frames and content. Students use website design software to create a simple website of their own, as well as examine publication and promotion options. NOTE: Basic computer competence is required. This course is not appropriate for Information Technology majors and may not be combined with other Information Technology courses to satisfy degree requirements.
Equivalent(s): CMPL 540G
Grade Mode: Letter Grading

CMPL 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in Computer Science. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): CMPL 544G
Grade Mode: Letter Grading

CMPL 550 - CompTIA Cloud Computing I
Credits: 4
This course provides a foundational understanding of cloud computing concepts, preparing students for the CompTIA Cloud+ certification. Students will explore key topics, including the principles of cloud computing, virtual hardware infrastructure, and strategies for migrating systems to the cloud. The course also covers cloud networking fundamentals and provides troubleshooting guidance for connectivity issues. Through hands-on activities and real-world scenarios, students will gain practical skills in managing cloud environments and addressing common challenges in cloud computing.
Grade Mode: Letter Grading

CMPL 552 - Cloud Security and Privacy
Credits: 4
This course provides a comprehensive introduction to the principles and practices of securing cloud environments, preparing students for careers in cloud security. Topics include understanding cloud service providers, identifying risks in cloud computing, and implementing key cloud security principles and governance strategies. Students will explore practical tools, develop a roadmap for managing cloud security, and examine pathways for professional growth in the field. Through hands-on exercises and case studies, students will gain the skills needed to address security and privacy challenges in cloud computing environments.
Grade Mode: Letter Grading

CMPL 564 - Introduction to Cryptography
Credits: 4
This course will introduce students to the foundations of modern cryptography with an eye toward practical applications. The course will cover the role of cryptography in privacy topics, such as passwords, privacy in school settings, and privacy in social media platforms.
Prerequisite(s): CMPL 525 with a minimum grade of D-.
Grade Mode: Letter Grading

CMPL 566 - Security Risk Assessment
Credits: 4
In this course, students will learn about the general information security risk management framework and its practices. Students will also learn how to identify and model information security risks and apply both qualitative and quantitative risk assessment methods.
Prerequisite(s): CMPL 525 with a minimum grade of D-.
Grade Mode: Letter Grading

CMPL 570 - Foundations of AI: A Business Perspective
Credits: 4
This course explores the foundational concepts, tools, and societal implications of AI technologies that are reshaping how we live, work, and learn. Students will examine the history and evolution of AI, including machine learning, natural language processing, computer vision, robotics, and generative AI. Emphasis is placed on real-world applications across business, education, healthcare, cybersecurity, and customer service. Through hands-on activities and critical analysis, students will investigate the ethical challenges, potential biases, and transformative power of AI, gaining practical insights into how AI is impacting the modern workforce and future careers.
Grade Mode: Letter Grading

CMPL 572 - Foundations of Machine Learning
Credits: 4
This course provides a comprehensive introduction to the fundamental principles of machine learning, focusing on key concepts, algorithms, and practical applications. Students will explore both supervised and unsupervised learning techniques, neural networks, deep learning, and natural language processing (NLP). The course emphasizes hands-on learning, guiding students through model evaluation, data preprocessing, and feature selection while considering the ethical implications of AI and machine learning. By the end of the course, students will have the knowledge and skills needed to apply machine learning techniques in real-world scenarios.
Grade Mode: Letter Grading

CMPL 610 - Artificial Intelligence for Information Technology Professionals
Credits: 4
This course introduces IT students to the core concepts, applications, and implications of artificial intelligence in modern technology environments. Through a practical, industry-focused lens, students will explore intelligent systems, machine learning, natural language processing, AI-driven automation, and ethical considerations. Emphasis is placed on how AI is transforming data analysis, IT operations, and user interaction in professional settings.
Grade Mode: Letter Grading

CMPL 614 - Computer and Network Systems
Credits: 4
This course offers a practical study of the hardware and software of modern computing systems and networks. Course topics include operating system software by studying the functions and interactions of computer and peripheral components such as central processing units (CPU), memory, storage, print engines, etc. Learners also study the workings of network components such as protocols, hubs, routers, and switches. Through exposure to a mix of theory, extensive vocabulary, and specific knowledge about trends in contemporary systems, learners develop skills to effectively communicate with others regarding the specification, purchase, and installation of an office or home computer system/network.
Prerequisite(s): CMPL 415 with a minimum grade of D- or CMPL 515G with a minimum grade of D- or CMPL 512 with a minimum grade of D- or CMPL 612G with a minimum grade of D-.
Equivalent(s): CMPL 614G
Grade Mode: Letter Grading

CMPL 618 - Mathematics for AI and Machine Learning
Credits: 4
This course introduces the fundamental concepts of linear algebra and calculus, two core areas of mathematics that power AI and machine learning algorithms. Students will explore vectors, matrices, eigenvalues, derivatives, gradients, and optimization techniques, gaining an intuitive and practical understanding of how these mathematical principles shape AI. With a focus on real-world applications and hands-on problem-solving, this course demystifies complex mathematical concepts and bridges the gap between theory and implementation in machine learning.
Grade Mode: Letter Grading

CMPL 620 - Virtualization and Cloud Computing
Credits: 4
In this course students will have the opportunity to learn the fundamental concepts, components, infrastructure, as well as security and privacy considerations of cloud computing and virtualization systems. Course activities will address the skills and knowledge necessary to install, configure, and manage virtual environments and how to effectively plan, implement, and manage cloud computing.
Prerequisite(s): (CMPL 614 with a minimum grade of D- or CMPL 614G with a minimum grade of D-) and (CMPL 525 with a minimum grade of D- or CMPL 525G with a minimum grade of D-).
Equivalent(s): CMPL 620G
Grade Mode: Letter Grading

CMPL 622 - Human Computer Interaction
Credits: 4
This course builds an understanding of human behavior with interactive objects, focusing on how to develop and evaluate interactive software using a human-centered approach. This includes examining the many different types of interactive software, understanding the principles of effective graphical user interface design, evaluating human-centered software and software development and exploring aspects of collaboration and communication as they affect individual and group interaction with software systems.
Attributes: Environment,TechSociety(Disc); Writing Intensive Course
Equivalent(s): CMPL 622G
Mutual Exclusion: No credit for students who have taken CS 760, IT 760W.
Grade Mode: Letter Grading

CMPL 630 - CompTIA Cloud Computing II
Credits: 4
This course builds on foundational cloud computing concepts, focusing on advanced topics essential for managing secure and efficient cloud environments. Students will explore securing cloud resources, implementing identity and access management (IAM), and optimizing cloud storage solutions. The course also covers performance management strategies and introduces automation techniques to streamline cloud operations. Through practical applications and case studies, students will develop the expertise needed for advanced cloud management and prepare for the CompTIA Cloud+ certification.
Prerequisite(s): CMPL 550 with a minimum grade of D-.
Grade Mode: Letter Grading

CMPL 632 - Cloud Financial Management
Credits: 4
This course explores the principles and practices of managing financial resources in cloud environments, with an emphasis on the discipline of FinOps (Cloud Financial Operations). Students will learn how to establish financial accountability within the variable spend model of cloud computing, enabling organizations to maximize value while maintaining cost efficiency. Topics include understanding and forecasting cloud spending, cost allocation strategies, leveraging rate discounts, and fostering collaboration between engineering and finance teams. The course also covers the automation of cost management tasks and sustainable practices in cloud spending. Through real-world examples and hands-on activities, students will develop the skills needed for data-driven decision-making and effective cloud financial management.
Grade Mode: Letter Grading

CMPL 637 - Python Programming II
Credits: 4
Students will have the opportunity to take their Python programming skills to the next level with this intermediate course. This course includes a review of basic concepts such as lists, strings, and dictionaries, and more advanced topics such as threading, multiprocessing, context managers, and generators.
Prerequisite(s): CMPL 530 with a minimum grade of D- or CMPL 530G with a minimum grade of D-.
Equivalent(s): CMPL 537G
Grade Mode: Letter Grading

CMPL 640 - Digital Forensics
Credits: 4
In this course, students will study the application of digital forensic technology to collect, analyze, document, and present information while maintaining a documented chain of custody. Overview of ethics, crime, and other legal regulations. Includes an overview of tools used for forensic analysis of digital devices in investigations.
Prerequisite(s): CMPL 525 with a minimum grade of D-.
Grade Mode: Letter Grading

CMPL 641 - Database Management Systems
Credits: 4
This course provides prospective users of data base management systems with a solid theoretical and practical foundation for using these systems in a variety of contemporary organizational environments. The course traces the nature of DBMS from general conceptual structures, through the design, interface and implementation of actual database systems. The course includes a mix of classical database theory with practical hands-on application using state of the art DBMS packages; similar to those used today by large and small organizations alike to run their information systems.
Prerequisite(s): (CMPL 415 with a minimum grade of D- or CMPL 515G with a minimum grade of D-) and (CMPL 512 with a minimum grade of D- or CMPL 612G with a minimum grade of D-).
Equivalent(s): MGMT 622G
Grade Mode: Letter Grading

CMPL 642 - Systems Analysis and Design
Credits: 4
This hands-on course introduces students to the role of the systems analyst in the development of information systems for organizations. The systems analyst is a problem-solver. As such, this course emphasizes development of effective solutions and communicating those solutions to the development team. Use of accepted design techniques, project management approaches, written and verbal communication, collaboration and teamwork, and organizational tools prepares the learner for the many demands of an entry-level systems analyst.
Prerequisite(s): (MTH 504 with a minimum grade of D- or MATH 504G with a minimum grade of D-) and (CMPL 512 with a minimum grade of D- or CMPL 612G with a minimum grade of D- or CMPL 415 with a minimum grade of D- or CMPL 515G with a minimum grade of D-).
Equivalent(s): MGMT 623G
Grade Mode: Letter Grading

CMPL 643 - Managing Information Technology
Credits: 4
This course helps students understand the important role of information technology in business strategy. Emphasizing the management of information technology rather than specific technical aspects, students explore the alignment of information technology with organizational goals, efficiencies gained through technology solutions, project management and the implementation of information technology, and organizational and industry changes driven by information technology. Investments in information technology for competitive advantage, the positioning of information technology in the organization, the pace of innovation in a digital economy, and emerging trends in information technology are discussed.
Attributes: Writing Intensive Course
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D- or PADM 500 with a minimum grade of D- or PADM 500G with a minimum grade of D- or MGMT 501G with a minimum grade of D- or MGMT 566 with a minimum grade of D- or MGMT 566G with a minimum grade of D-.
Equivalent(s): MGMT 624G
Grade Mode: Letter Grading

CMPL 644 - Special Topics: Upper Level
Credits: 1-4
The study of current and variable topics in Computer Science. Course content changes from term to term. It is expected that the learner will have prior coursework or experience in the subject area.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): CMPL 644G
Grade Mode: Letter Grading

CMPL 645 - Ethical Hacking
Credits: 4
This course introduces students to the basics of ethical hacking and penetration testing (pen-testing), including some common attack types, terminology, types of security tests, reconnaissance phases, documentation, pen-testing types, attack phases, and security control assessment methods.
Prerequisite(s): CMPL 525 with a minimum grade of D-.
Grade Mode: Letter Grading

CMPL 648 - Programming with JavaScript
Credits: 4
This hands-on and comprehensive course is designed to introduce students to the fundamental concepts and practical applications of JavaScript, one of the most widely used programming languages for building interactive and dynamic websites. Students will practice collaborative project management methods in several web application projects.
Prerequisite(s): CMPL 415 with a minimum grade of D-.
Grade Mode: Letter Grading

CMPL 665 - Web Application Development
Credits: 4
This course covers modern website design and development using Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), and JavaScript. Students will learn the history and overall structure of the Internet and its key paradigms and technologies. Students will also learn how to design and code websites for various audiences and client technologies. The course will also cover current website management technologies including content management systems, JavaScript libraries, and website development frameworks.
Prerequisite(s): CMPL 530 with a minimum grade of D- or CMPL 530G with a minimum grade of D-.
Equivalent(s): CMPL 638G
Grade Mode: Letter Grading

CMPL 725 - Advanced Programming with Python
Credits: 4
This course introduces advanced programming skills and focuses on the core concepts of object-oriented programming (OOP) using Python, a high-level language. OOP shifts the focus from thinking about code as a sequence of actions, to looking at your program as a collection of objects that interact with each other. The course focuses on the understanding and practical mastery of object-oriented concepts such as classes, objects, data abstraction, methods, and the three tenets of OOP. encapsulation, inheritance, and polymorphism.
Prerequisite(s): CMPL 637 with a minimum grade of D- or CMPL 537G with a minimum grade of D-.
Equivalent(s): CMPL 625G
Grade Mode: Letter Grading

CMPL 744 - Cybersecurity Law
Credits: 4
This course is a study of cybersecurity law, standards, and regulations from a layperson's perspective. This course is essential for students entering the cybersecurity field to understand the legal and regulatory parameters that cybersecurity programs must adhere to. This course focuses on U.S. and international cybersecurity law, civil and criminal procedures relating to cybercrime, cyber offense case law, privacy, and violation defense. The course also provides an overview of industry cybersecurity rules and statutes.
Prerequisite(s): CMPL 525 with a minimum grade of D-.
Grade Mode: Letter Grading

CMPL 750 - Programming for AI with Python
Credits: 4
This course provides a comprehensive, hands-on introduction to Python programming with a focus on applications in artificial intelligence (AI). Students will learn Python fundamentals, explore AI concepts, and develop practical skills for working with data, building intelligent systems, and applying deep learning techniques. Through structured lessons, real-world examples, and project-based learning, participants will progress from foundational programming concepts to implementing AI-driven applications, while also examining the ethical and societal implications of AI technologies.
Grade Mode: Letter Grading

CMPL 760 - Mobile Application Development
Credits: 4
This course introduces students to programming technologies, design, and development related to mobile applications. Topics include application user interfaces, styling, navigation, simple animation, and Android - and iOS-specific components and APIs. Students will program cross-platform mobile applications using JavaScript and React Native, an open-source user interface framework. Through course activities, students will have the opportunity to develop the skills needed to create basic applications for mobile devices.
Prerequisite(s): CMPL 648 with a minimum grade of D-.
Equivalent(s): CMPL 633G, CMPL 660
Grade Mode: Letter Grading

CMPL 795 - Integrative Capstone: Internship in Computer Information Tech and Tech Management
Credits: 4
This upper level course is a field-based experience designed to develop and hone the practical application skills of students in a Computer Information Technology or Technology Management major. Students apply for an internship at a self-selected site and negotiate the terms of the internship experience with a site supervisor under the auspices of their GSC internship mentor. The internship requires documented evidence of eighty hours of supervised experience and practice in a field setting where Computer Information Technology or Technology Management knowledge and skills are applied. This course is the capstone for the BS in Computer Information Technology and BS in Technology Management. NOTE: Registration for this course as an internship is by permission of the Office of Academic Affairs. Early registration deadlines may apply. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): CMPL 651G
Grade Mode: Letter Grading

CMPL 797 - Integrative Capstone: Best Practices in Information Technology
Credits: 4
This course is a project-oriented capstone learning experience that is designed to integrate learning from coursework with related work or other experience. Students focus on best practices in information technology and project management, with specific attention to their area of specialization. Students will complete an integrative project related to their program option and career interests. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): CMPL 650G
Grade Mode: Letter Grading

Computing Technology (COMP)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

COMP 405 - Introduction to Web Design and Development
Credits: 4
Students learn the fundamentals of how the Internet works, gain practice with foundational technologies that power websites and learn how to solve problems like a programmer. A significant portion of he course covers web front-end design and development; students create a website using HTML/CSS, and are introduced to JavaScript language and responsive web design techniques. Topics include Internet history and structure, legal and ethical issues. No prior programming experience is required.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): IT 403
Grade Mode: Letter Grading

COMP 415 - Mobile Computing First and For Most
Credits: 4
This course examines how mobile computing is transforming our everyday lives and the society and environment in which we live. In this course the students will engage the mobile ecosystem by inventing apps and solving problems of personal, social, and environmental relevance. Students will learn computational thinking skills and create mobile apps using AppInventor, a free and open source visual blocks-based programming environment. Students will share their creative apps with peers and communities. They will also exercise inclusion, civic engagement, and peer learning in the context of innovating with free and open source software that empower individuals and communities.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

COMP 424 - Applied Computing 1: Foundations of Programming
Credits: 4
Integrates three essential computing competencies: Problem solving, data analysis, and programming. Problems are chosen from data-driven real-world examples such as astronomy, cryptography, environmental simulation, image processing, and video games. Emphasis is on formulating problems, thinking creatively about how computations can solve problems, and expressing solutions clearly and accurately. Using Python, students learn design, implementation, testing, and analysis of algorithms and programs.
Equivalent(s): CS 410, CS 414, CS 415
Grade Mode: Letter Grading

COMP 430 - Systems Fundamentals
Credits: 4
The underlying hardware and software infrastructure upon which applications are constructed is collectively described by the term "computer systems." Computer systems broadly span the subdisciplines of operating systems, parallel and distributed systems, communications networks, and computer architecture. The class will present an integrative view of these fundamental concepts in a unified albeit simplified fashion, providing a common foundation for the different specialized mechanisms and policies appropriate to the particular domain area.
Grade Mode: Letter Grading

COMP 500 - Discrete Structures
Credits: 4
This course prepares students for understanding computational complexity; i.e., what makes a given task/problem hard and how hardness is measured. It accomplishes this through the study of algorithms, permutations, combinations, probability, graph theory, and trees.
Grade Mode: Letter Grading

COMP 520 - Database Design and Development
Credits: 4
An introduction to developing database applications with business users. Topics include fundamentals of the relational model, structured query language, data modeling and database design and implementation. Students use a variety of database management system tools to model, code, debug, document, and test database applications. Students complete real-world team projects.
Grade Mode: Letter Grading

COMP 525 - Data Structures Fundamentals
Credits: 4
Data structures and algorithms are fundamental to developing solutions for computational problems. In this course students design and implement data and functional abstractions; analyze and select appropriate data structures to solve computational problems; practice programming and software development techniques to implement computational solutions.
Prerequisite(s): COMP 424 with a minimum grade of D- or COMP 425 with a minimum grade of D-.
Equivalent(s): CS 416, CS 417
Grade Mode: Letter Grading

COMP 530 - Machine and Network Architecture
Credits: 4
Examines the following topics. Machine organization: program and data representation; registers, instructions, and addressing modes; assemblers and linkers. Impact of hardware on software and software on hardware. Introduces the Internet protocol suite and network tools and programming and discusses various networking technologies.
Prerequisite(s): COMP 430 with a minimum grade of D-.
Grade Mode: Letter Grading

COMP 550 - Networking Concepts
Credits: 4
Explores the fundamentals of data communications and networking requirements for an organization, including the standard layers of network organization; network technologies; and protocols for LANs, WANs, wireless networks, and switched and routed networks. Includes issues of security, topology, management, and future developments.
Grade Mode: Letter Grading

COMP 560 - Ethics and the Law in the Digital Age
Credits: 4
Examines classical and ethical and legal constructs as they pertain to current and topical issues. Students develop and articulate a personal point of view on a broad range of issues based on sound ethical principles and consider the impact of such views on co-workers, employers, and society in general. Topics also include: major social issues involving intellectual property, privacy, current U.S. and international relations relevant to ethical theories. The interplay between ethics and law is explored through current case studies and students formulate and support conclusions based on ethical constructs presented in class. Case study analysis is a major component in course delivery.
Attributes: Humanities(Disc); Writing Intensive Course
Grade Mode: Letter Grading

COMP 570 - Statistics in Computing and Engineering
Credits: 4
An introduction to tools from probability and statistics that are needed by computing and engineering professionals. Exploratory data analysis including graphic data analysis. discrete and continuous probability distributions, inference, linear regression, and analysis of variance, with applications from artificial intelligence, machine learning, data mining, and related topics. Project work and use of statistical software are an integral part of the course.
Prerequisite(s): MATH 425 with a minimum grade of D-.
Grade Mode: Letter Grading

COMP 625 - Data Structures and Algorithms
Credits: 4
An introduction to object-oriented design, analysis, and implementation of data structures and algorithms. Students apply concepts and techniques to develop information processing applications. Best programming practices of editing, debugging, documentation, testing, and code review are stressed. Familiarity with an object-oriented programming language and experience with application development are required.
Prerequisite(s): COMP 425 with a minimum grade of D-.
Equivalent(s): CS 515
Grade Mode: Letter Grading

COMP 630 - Systems Software
Credits: 4
Today's organizations need to deliver applications and services by automating processes that develop and deploy software and manage scalable computing infrastructures. Students will learn how to integrate development, operations, and cloud computing and gain experience with design approaches, version control, continuous integration, cloud-based APIs, and monitoring metrics. Key to systems software tools and automation processes are increased communication and collaboration practiced in the course team projects. Students who took COMP 698 Sp/Topic Systems Software cannot repeat for credit.
Prerequisite(s): COMP 530 with a minimum grade of D-.
Grade Mode: Letter Grading

COMP 650 - Network Administration and Maintenance
Credits: 4
Advances the understanding of networks through practical application of administering and maintaining and intranet and its servers. Students use a modern server operating system and network management tools. Routine tasks include: install and configure servers, setup directory services and access privileges, tune network services, understand and implement network security, perform routine maintenance, and practice troubleshooting techniques.
Prerequisite(s): COMP 550 with a minimum grade of D-.
Grade Mode: Letter Grading

COMP 690 - Internship Experience
Credits: 4
The internship provides field-based learning experience through placement in a computing field. Students gain practical computing experience in a business, non-profit, or government organization. Under the direction of a faculty advisor, the student is expected to contribute to the information technology products, processes, or services of the organization. Majors only. May be repeated but no more than 4 credits may fill major requirements.
Prerequisite(s): UMST 582 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

COMP 705 - Full Stack Development
Credits: 4
Students work in teams and implement, test, document, demonstrate, and deploy web systems that solve organizational needs expressed by real clients. Emphasis is on advanced server-side and client-side programming and integration of web application with database and web server applications. Free and open source development and communication tools are used to carry out the course project.
Grade Mode: Letter Grading

COMP 715 - Information Security
Credits: 4
Topics include general security principles and practices, network and system security, access control methodology, and cryptography. Students develop a simple cryptographic system based on sound mathematical principals, work to improve it, and find ways to attack it. Some programming required.
Grade Mode: Letter Grading

COMP 720 - Database Systems and Technologies
Credits: 4
This is a project course that provides practical experience with developing a storage subsystem of a computer information system. Topics include data modeling, database design, system implementation, and integration with a target application. Emphasis is on implementation activities, database application development artifacts, project communication, and supporting system development and project management tools.
Grade Mode: Letter Grading

COMP 721 - Big Data for Data Engineers
Credits: 4
In this course students gain practical experience developing data-oriented applications in modern infrastructure frameworks, also known as the cloud data solutions. Guided by what a data scientist profile is, students become familiar with the use cases of data oriented applications. They will apply key data modeling and data design concepts to meet business requirements. Students will also apply modern software development to iteratively construct solutions using established reference architectures. Project work will be based in Google Cloud Platform and Amazon Web Services.
Grade Mode: Letter Grading
Special Fee: Yes

COMP 725 - Programming Languages
Credits: 4
Explores the main features of modern, high-level, general purpose programming languages from the user point of view. Provides students with an opportunity to use non-imperative programming paradigms, such as object-oriented, functional, and visual, and to learn how specific features of such languages can be used efficiently in solving problems. The purpose is to gain knowledge regarding the languages studied as well as providing the basis to conduct analysis related to comparisons and divergence in capabilities.
Grade Mode: Letter Grading

COMP 730 - Software Development
Credits: 4
Presents an iterative methodology for developing software systems. Development activities include requirements elicitation and analysis, system and object design, implementation and testing, project and configuration management, infrastructure maintenance, and system deployment to end user. Students work in teams, assume developer roles, build models of a real-world system, and deliver a proof-of-concept or prototype.
Attributes: Writing Intensive Course
Prerequisite(s): COMP 525 with a minimum grade of D-.
Grade Mode: Letter Grading

COMP 735 - Secure Networking Technology
Credits: 4
In this course students study modern computer networking and focus on principles, architectures, protocols, security, and cloud. Modern IT and cloud computing call for expertise in security, which is a theme across all computing subjects, as well as a core area of study. Course requirements include both programming and administrative exercises to explore and gain practice with networking topics. Students who have taken COMP 780-Special Topics (Networking Technologies) cannot receive credit for COMP 735.
Grade Mode: Letter Grading

COMP 740 - Machine Learning Applications and Tools
Credits: 4
Introduces students to practical approaches of machine learning. The course is an exploration of creative applications of artificial intelligence using modern machine learning components and tools. Different application domains are considered, such as computer vision, natural language processing, and cyber security. Students learn to evaluate machine learning systems as well as their potential prediction problems. Cannot receive credit if credit earned for COMP 780 AdvTop/ML Tools & Appl.
Grade Mode: Letter Grading

COMP 741 - Practical Artificial Intelligence
Credits: 4
Balancing the science of AI with its engineering applications, the course focuses on AI foundations and principles for building intelligent computational systems. Reasoning, planning, learning, explaining, and acting with certainty and uncertainty are AI areas in which students will practice how to build AI systems that solve real-world problems. Particular attention is given to the impact of AI applications on our society and related ethical, privacy, security, and safety implications.
Prerequisite(s): COMP 525 with a minimum grade of D-.
Grade Mode: Letter Grading

COMP 742 - Fundamentals of Computer Vision
Credits: 4
This course provides a comprehensive introduction to computer vision with topics covering both the theoretical and practical skills needed to pursue a career in computer vision, pattern recognition, image processing, and signal processing. Students will learn basic concepts as well as hands on experience to solve various real-life problems in image processing, feature extraction, object recognition, and image understanding. Not offered for credit if credit is received for COMP780/ COMP 880 Computer Vision.
Grade Mode: Letter Grading

COMP 755 - Digital Forensics
Credits: 4
This course studies cyber-attack prevention, planning, detection, response, and investigation with the goals of counteracting cybercrimes. The topics covered in this course include fundamentals of digital forensics, forensic duplication and analysis, network surveillance, intrusion detection and response, incident response, anti-forensics techniques, anonymity and pseudonymity, computer security policies and guidelines, and methods and standards for extraction and preservation of digital evidence.
Prerequisite(s): COMP 525 with a minimum grade of D-.
Grade Mode: Letter Grading

COMP 760 - Data Visualization & Communication
Credits: 4
Through hands-on experience with a leading data visualization tool, the course introduces the concepts of data visualization to allow students to communicate and analyze data effectively using visual techniques.
Grade Mode: Letter Grading

COMP 765 - Secure Software Principles
Credits: 4
This course will explore the fundamentals of software security, covering important software vulnerabilities and attacks that exploit them. This includes, but not limited to, such topics as buffer overflows, SQL injection, session hijacking and considers defenses that prevent or mitigate these attacks, including advanced testing and program analysis techniques. Will look at techniques at each phase of the development cycle that can be used to strengthen the security of software systems.
Prerequisite(s): COMP 525 with a minimum grade of D-.
Grade Mode: Letter Grading

COMP 780 - Advanced Topics in Computing
Credits: 1-4
The course includes advanced topics and emerging areas in computing. Barring duplication of subject, the course may be repeated for credit.
Grade Mode: Letter Grading

COMP 785 - Applied Cryptography
Credits: 4
This course aims to give students an overview of cryptographic concepts and methods, a good knowledge of some commonly used cryptographic primitives and protocols, a sound understanding of theory and implementation, as well as limitations and vulnerabilities, and an appreciation of the engineering difficulties involved in employing cryptographic tools to build secure systems. Some programming required.
Prerequisite(s): COMP 525 with a minimum grade of D-.
Grade Mode: Letter Grading

COMP 790 - Capstone Project
Credits: 4
This course requires the development of a real world project that responds to an IT organizational need. The project is undertaken by a team of students. An iterative approach is used to incrementally address the project requirements while constructing a prototype of the IT solution to the original problem.
Attributes: Writing Intensive Course
Prerequisite(s): COMP 690 with a minimum grade of D- and CIS 610 with a minimum grade of D-.
Grade Mode: Letter Grading

COMP 791 - Senior Thesis
Credits: 4
This course requires the development of a real world project representative of the computing discipline of their major. An iterative approach is used to incrementally address the project requirements while constructing a prototype of the solution to the original problem. A thesis, describing the work, will be the final product, submitted at the end of the course and presented to a committee of faculty.
Prerequisite(s): COMP 690 with a minimum grade of D-.
Equivalent(s): COMP 790
Grade Mode: Letter Grading

COMP 795 - Independent Study
Credits: 1-4
Advanced individual study under the direction of a faculty mentor. Content area to be determined in consultation with faculty mentor. May be repeated.
Grade Mode: Letter Grading

Criminal Justice (CRIM) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CRIM 410 - Introduction to Criminology
Credits: 4
This course introduces the learner to the field of criminology by reviewing the historical underpinnings of the modern-day study of crime and criminals, examining the theoretical causes of crime and criminality, and evaluating society's responses to crime. Learners are introduced to the sociological, biological, and psychological schools of criminological thought. Topics include crime statistics and social and legal mechanisms used to address criminal activity and the individual criminal.
Attributes: HumanBehavSocial Sys (Gen Ed)
Equivalent(s): CRIM 500G
Grade Mode: Letter Grading

CRIM 425 - Juvenile Justice
Credits: 4
This course will take an in-depth view of how the components of the criminal justice system address juvenile delinquency. How and why a juvenile is entered into the criminal justice system will be examined and alternatives to entry will be explored. These alternatives include diversionary programs and second-chance protocols. Social and economic disparities will be discussed regarding how those factors figure into the propensity of crimes being committed by juveniles. Additionally, youthful offender procedures that result in juveniles being charged, tried, and, in some cases, incarcerated in the adult system will be explored. Lastly, the course will explore the basic competencies of professionals who interact with juveniles in the criminal justice system and in the agencies that contribute to the rehabilitation and reintegration of juveniles after a finding of delinquency.
Attributes: HumanBehavSocial Sys (Gen Ed); Social Science (Discovery)
Equivalent(s): CRIM 525G
Grade Mode: Letter Grading

CRIM 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in Criminology. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): CRIM 544G
Grade Mode: Letter Grading

CRIM 555 - The Criminal Justice System
Credits: 4
This course presents an overview of the criminal and juvenile justice systems and the variety of agencies charged with the detection, prosecution, and subsequent application of penalties. The course begins with an examination of the extent and nature of crime in the U.S. It then reviews the subsystems associated with the criminal and juvenile justice fields, including the police, criminal and juvenile courts, and corrections and treatment processes. The review of each subsystem includes a discussion of its historical development as well as issues currently confronting the profession. Students also explore and evaluate differing philosophies underlying corrections. The course concludes with an examination of the future of the criminal and juvenile justice systems from political and sociological perspectives.
Attributes: HumanBehavSocial Sys (Gen Ed)
Equivalent(s): CRIM 555G
Grade Mode: Letter Grading

CRIM 600 - Crime Prevention and Control
Credits: 4
This course focuses on situational crime prevention by both law enforcement personnel and the general public. Theoretical and practical aspects of techniques of situational prevention are examined. Students formulate their own theories on crime prevention and control, and evaluate methods for the reduction of crime and corresponding financial and social costs.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D-.
Equivalent(s): CRIM 600G
Grade Mode: Letter Grading

CRIM 644 - Special Topics: Upper Level
Credits: 1-4
A study of current and variable topics in Criminology. Course content changes from term to term. It is expected that the learner will have prior coursework or experience in the subject area.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): CRIM 644G
Grade Mode: Letter Grading

CRIM 645 - Crime Victim Rights and Remedies
Credits: 4
The course examines the various relationships between the crime victim and the police, courts, advocates, and other agencies such as the media. Specific categories of crime victims are studied, including drunk driving victims, sexual assault victims, domestic violence and stalking victims, hate crime victims, and child and elderly victims.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D- or PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOC 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D-.
Equivalent(s): CRIM 603G
Grade Mode: Letter Grading

CRIM 680 - Corrections, Probation and Parole
Credits: 4
This course presents an extensive examination of the organization and operations of correctional, probation and parole agencies as particular segments of the United States criminal justice system. Learners study corrections, probation and parole from a variety of standpoints, including historical and philosophical foundations, the theoretical concerns that the options present, as well as the practical aspects of those services. Other topics include a review of community-based corrections, options for treatment and intermediate sanctions, issues surrounding court orders and pre-sentence reports, and an examination of correctional and probation and parole officers' professional roles, and the legal decisions affecting practice in this field.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): (CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D-) and (CRIM 555 with a minimum grade of D- or CRIM 555G with a minimum grade of D-).
Equivalent(s): CRIM 606G
Grade Mode: Letter Grading

CRIM 707 - Constitutional Law
Credits: 4
This course examines how the U.S. Supreme Court and state supreme courts interpret constitutional issues of major societal importance through critical analysis of key decisions and cases. Through reading primary material, students will trace the historical development of constitutional law with an emphasis on studying the contextual factors that have shaped the Court's controversial decisions.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): (CRIT 501 with a minimum grade of D- or CRIT 501G with a minimum grade of D-) and (POL 554 with a minimum grade of D- or POL 554G with a minimum grade of D-).
Equivalent(s): CRIM 607G
Grade Mode: Letter Grading

CRIM 725 - Ethical Decision Making in the Criminal Justice System
Credits: 4
This course introduces students to the discipline of ethical decision making by criminal justice professionals in a system where great authority is given, and even greater responsibility is expected. The concept of discretion will be an ever-present factor in discussions of critical decisions made by law enforcement, the courts, and corrections. In this course, students will be exposed to ethical scenarios, and they will be asked to discuss what the proper course of action was, or should have been. In addition to real-life case studies, students will be asked to work through challenging hypotheticals that test their understanding of ethical dilemmas in the criminal justice field. In sum, the student of this course will have the opportunity to develop a much greater awareness of the ethical tests faced by criminal justice professionals on a daily basis and the expectations of society in that regard.
Attributes: Writing Intensive Course
Prerequisite(s): CRIM 555 with a minimum grade of D- or CRIM 555G with a minimum grade of D-.
Equivalent(s): CRIM 610G
Grade Mode: Letter Grading

CRIM 795 - Integrative Capstone: Internship in Criminal Justice
Credits: 4
This capstone course is a field-based internship designed to develop and hone the practical application skills of a Criminal Justice major. The course requires students to integrate the knowledge and skills gained from other courses in the program and to demonstrate the ability to apply their knowledge to new subject matter and practical situations. Students apply for an internship at a self-selected site and negotiate the terms of the internship experience with a site supervisor under the auspices of their faculty mentor. The internship requires documented evidence of eighty hours of supervised experience and practice in a field setting where criminal-justice-related knowledge and skills are applied. NOTE: Registration for this course, an internship, is by permission of Academic Affairs. Early registration deadlines may apply. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): CRIM 651G
Grade Mode: Letter Grading

CRIM 797 - Integrative Capstone: Project in Criminal Justice
Credits: 4
This capstone course in the Criminal Justice degree program is designed to offer learners the opportunity to reflect upon and synthesize prior learning and to apply it at a higher level of understanding. Knowledge and skills from other courses in the program and from experience are integrated in focused individual projects. Such projects might include independent research or a work-related or other applied project. Analysis of the individual project in light of theory and research in the field is a key component of this course. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): CRIM 650G
Grade Mode: Letter Grading

Critical Thinking (CRIT) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

CRIT 501 - Introduction to Critical Inquiry
Credits: 4
Introduction to Critical Inquiry provides the foundation for an informed and meaningful college experience through the cultivation of intellectual curiosity. Through the study of media and popular culture and the completion of short writing assignments, students learn how to develop and scale a personally-motivated research question, refine their topic, determine effective search strategies for finding credible and appropriate information, and learning to recognize bias and logical fallacies. Important aspects of the research process are learning how to analyze different types of argument and to evaluate information sources from a variety of venues. Critical Inquiry fosters the self-awareness and intellectual perspective that are the hallmarks of well-educated persons and lifelong, engaged students in the twenty-first century.
Attributes: Critical Inquiry (Gen Ed); Inquiry (Discovery); Writing Intensive Course
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D- or ENGL 401 with a minimum grade of D-.
Equivalent(s): CRIT 501G
Grade Mode: Letter Grading

CRIT 602 - Advanced Critical Analysis and Strategic Thinking
Credits: 4
What is the link between an academic degree and one's career or professional development? In this course, students explore trends in their field of study and connect them to their academic and professional context. Students synthesize and present their research findings though a variety of formal and informal written communication formats. This course reinforces critical analysis and strategic thinking skills for students developing their course of study, seeking professional advancement, or preparing for future graduate study. Students with a regionally-accredited associate degree do not have to take either ENG 420 or CRIT 501 as prerequisites for CRIT 602.
Attributes: Critical Inquiry (Gen Ed); Writing Intensive Course
Prerequisite(s): (ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-) and (CRIT 501 with a minimum grade of D- or CRIT 501G with a minimum grade of D-) or (Has Accred Associate Deg with a score of WAIV).
Equivalent(s): CRIT 502G, CRIT 602G
Grade Mode: Letter Grading

CRIT 603 - Critical Inquiry in Prior Learning Assessment
Credits: 4
This course is designed for adults who have identified prior experiential learning equivalent to outstanding degree requirements through a systematic process of goal-setting and self-assessment in the context of degree-planning. Students use the conceptual framework of critical inquiry to demonstrate this learning in an eportfolio. For each course-equivalent credit request, the portfolio will identify the context for the student's learning in the subject matter, trace the progression of the learning over time, and explain how the learning is equivalent to a degree requirement. The student will demonstrate mastery of each learning outcome for the credit request and integrate the learning outcomes in a relevant personal case study in decision-making. Two credit requests that meet the criteria to be submitted to Academic Affairs for evaluation are required to pass CRIT 603. NOTE: Students within 16 credits of their projected degree completion date are not eligible to take CRIT 603.
Attributes: Writing Intensive Course
Prerequisite(s): CRIT 602 with a minimum grade of D- or CRIT 502G with a minimum grade of D- or CRIT 602G with a minimum grade of D-.
Equivalent(s): CRIT 503G, CRIT 603G
Grade Mode: Letter Grading

Culinary Arts & Nutrition (CAN)

No courses are currently active in the course inventory for this subject prefix.

Cybersecurity Policy & Risk Management (CPRM)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

No courses are currently active in the course inventory for this subject prefix.

Data Analytics (DAT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

DAT 510 - Introduction to Data Analytics
Credits: 4
Data analytics is defined as a scientific process that produces actionable insights. Students will be introduced to the concepts of data analysis, what the role of a data analyst will do, and the tools that are used to perform daily functions. This course will cover data analytics and data governance where students will learn about the fundamentals of data gathering, data mining, and how the decision-making process can be affected. This course also addresses the skills that are required to effectively communicate data to co-workers, leadership, and stakeholders. Excel proficiency is expected prior to enrollment in this course. Students should consider completing CMPL 402 Excel if they have not completed an Excel course in transfer.
Equivalent(s): DATA 510G
Mutual Exclusion: No credit for students who have taken BUS 515.
Grade Mode: Letter Grading

DAT 535 - Data Mining, Cleaning, and Visualization
Credits: 4
This course immerses students in virtual lab environments for hands-on experience with concepts in data modeling, data cleaning, data mining, and data visualization. Students will use industry-standard applications like Power BI to prepare data for customized dashboards and graphical representations using various data types. The applications will focus on creative, personalized data storytelling in culminating presentations.
Prerequisite(s): DAT 510 with a minimum grade of D- or DATA 510G with a minimum grade of D- or BUS 675 with a minimum grade of D-.
Equivalent(s): DATA 520G
Grade Mode: Letter Grading

DAT 610 - Data Analytics and Technologies
Credits: 4
Students will have the opportunity to explore contemporary systems and technologies impacting the field of data analytics, including the cloud, AI, and machine learning. This course will also explore areas of technology that provide opportunities for future professional specialization, such as emerging Big Data technologies that support the work of data analysts, and the role of Information Technology (IT).
Prerequisite(s): DAT 535 with a minimum grade of D- or DATA 520G with a minimum grade of D-.
Equivalent(s): DATA 610G
Grade Mode: Letter Grading

DAT 620 - Data Analytics in Business Intelligence
Credits: 4
This course will examine the role of data analysis through the lens of multiple business disciplines such as business, health care, and marketing. Students will have the opportunity to explore key areas in the analytical process, including how data are created, stored, and accessed. The course covers how businesses and organizations work with data to create environments in which analytics can drive effective and efficient decision making.
Prerequisite(s): DAT 610 with a minimum grade of D- or DATA 610G with a minimum grade of D-.
Equivalent(s): DATA 620G
Grade Mode: Letter Grading

DAT 670 - Advanced Data Analytics
Credits: 4
Students will have the opportunity to explore more advanced data analytics methods such as collaborating on hypothesis testing and performing root cause analysis and practice presenting visualizations of data analysis that highlight the insights gained from analysis. The handling of imperfect data will also be covered.
Prerequisite(s): (DAT 620 with a minimum grade of D- or DATA 620G with a minimum grade of D-).
Equivalent(s): DATA 630G
Grade Mode: Letter Grading

Decision Sciences (DS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

DS 444 - Meaning of Entrepreneurship
Credits: 4
This course explores the idea and ideals of entrepreneurship, the creating of value through individual initiative, creativity and innovation. The idea of entrepreneurship is of significant relevance in the highly dynamic and competitive 21st century global economy. It is an idea that is important for students to understand and to critically consider and apply. Encourages the development of multiple views of entrepreneurship, and uses a broad, not just business, approach to the study as it engages students in the subject matter. Open to all majors.
Attributes: Environment,TechSociety(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

DS 520 - Topics in Entrepreneurship/Decision Sciences
Credits: 4
Special topics in entrepreneurship, information systems and business analytics. Vary by semester.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

DS 550 - Introduction to Angel and Venture Capital Investing
Credits: 2
This course serves as the foundational course for students entering the Mel Rines Student Angel Investment Fund as Associates. This introductory course provides students with essential knowledge and skills in private equity, angel investing, and venture capital, preparing them for hands-on participation in the Rines Angel Fund in DS 650. The course offers a comprehensive overview of the private equity landscape, with particular emphasis on early-stage investing from both the entrepreneur's and investor's perspectives. Students will learn the fundamental processes involved in evaluating startup companies, conducting preliminary research, and supporting investment analysis activities.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 4 times.
Grade Mode: Credit/Fail Grading

DS 620 - Topics in Decision Sciences
Credits: 1-4
Special topics, vary by semester.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

DS 650 - The Mel Rines Student Angel Investment Fund
Credits: 2
The Mel Rines Student Angel Investment Fund is a cross-disciplinary, undergraduate, student-managed private equity fund. The Fund allows students to learn angel and venture capital investment strategies through the first-hand experience of investing in start-up companies. Students evaluate entrepreneur pitches, conduct due diligence on potential investments, work with angel partners, and present to an investment committee their recommendations to invest capital. Students interested in joining the Fund must submit an application and undergo an interview process. Students in good standing may retake the course.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Credit/Fail Grading

DS 652 - Artifex
Credits: 2
Artifex aims is to equip its members with the essential skills of a data scientist. The course delivery is a mix of lectures and project-based learning. Lectures and course content are tailored to the business analytics project(s) we are working on in any given semester. Artifex is also an active and growing student club. As such, Artifex is a great opportunity to network with other students and professionals who are passionate about using data to improve the way businesses work.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

DS 654 - Sports Analytics Lab
Credits: 2
This course will explore "real-world" applications of data and insights to UNH athletics and outside sports organizations. You will learn terms commonly used in sports analytics and begin to understand some of the complex decisions that an athletic organization makes with data, because you will be helping them do it! This course is group project oriented with a few whole class meetings to share best practices and outcomes. Students will be split into teams of 3-5and be assigned to a sports client.
Repeat Rule: May be repeated for a maximum of 12 credits. May be repeated up to 6 times.
Grade Mode: Credit/Fail Grading

DS 662 - Programming for Business
Credits: 4
Introduces students to programming concepts. Covers fundamentals including functions, variable types, conditionals, and data structures. Students apply these concepts to a variety of business analytics problems including data collection, wrangling, reshaping, summarizing , and visualization.
Prerequisite(s): ADMN 410 with a minimum grade of C-.
Equivalent(s): DS 562
Grade Mode: Letter Grading

DS 671 - Data Visualization and Prescriptive Analytics
Credits: 4
The course focuses on Descriptive and Prescriptive Analytics. Students gain modeling and data analysis and visualization skills necessary to address a wide variety of business problems. In Descriptive Analytics, students learn principles of data visualization, data cleanup and wrangling, advanced data analysis and visualization tools, and dashboard design. In Prescriptive Analytics, students learn advanced spreadsheet modeling/programming, formulating and solving a variety of optimization problems, and performing sensitivity analysis.
Prerequisite(s): (ADMN 410 with a minimum grade of C- or CS 415 with a minimum grade of C-) and (ADMN 510 with a minimum grade of C- or MATH 539 with a minimum grade of C- or MATH 540 with a minimum grade of C-).
Equivalent(s): DS 766
Mutual Exclusion: No credit for students who have taken SC 671.
Grade Mode: Letter Grading

DS 673 - Database Management
Credits: 4
Provides students with the skills necessary to understand the database environment of the firm. Topics include data models, normalization, SQL, data warehouses, and nosQL databases. Students learn to design and implement moderately complex relational databases in multi-user, client/server environments.
Prerequisite(s): ADMN 410 with a minimum grade of C-.
Equivalent(s): DS 773
Grade Mode: Letter Grading

DS 720 - Topics in Decision Sciences II
Credits: 4
Introduces students to commonly used predictive analytics techniques and necessary programming with focus on regression analysis and model building. The course coverage is supported with real data applications and illustrations. The topics include linear and non-linear regression model building/selection, residual analysis, search algorithms, generalized linear models/classification, and clustering algorithms.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

DS 741 - Startup Analytics
Credits: 4
This course introduces students to data analytics for startup capital management, with a special focus on leveraging AI and machine learning (ML) to optimize financial strategies, funding decisions, and investor relations. Through a hands-on approach, students will learn how to use data and machine learning techniques to forecast capital needs, evaluate funding sources, track startup performance, and optimize investor interactions. The course blends fundamental concepts of startup capital management with modern data-driven tools to help students make informed, data-centric decisions at each stage of startup growth.
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Grade Mode: Letter Grading

DS 742 - Internship in Entrepreneurial and Management Practice
Credits: 4
Involves working for leading companies and dynamic entrepreneurs, as well as classroom instruction. The priority experiential, real-world, and real-time learning in the high-growth environment of entrepreneurial ventures. Focus on several topic areas, including venture capital.
Grade Mode: Letter Grading

DS 743 - Venture Scaling Strategies
Credits: 4
"Venture Scaling Strategies" is an entrepreneurship course designed to equip students with the essential tools and frameworks to scale a business successfully. Based on Verne Harnish's book Scaling Up, this course dives into the critical areas of People, Strategy, Execution, and Cash to help students develop comprehensive scaling strategies. Through practical applications, case studies, and interactive discussions, students will learn how to navigate the complexities of growth, create effective strategic plans, manage financial resources, build high-performing teams, and implement operational systems to support expansion. Ideal for aspiring entrepreneurs and business leaders, this course provides the roadmap to take ventures to the next level. The course will include a practical, hands-on, engagement project.
Grade Mode: Letter Grading

DS 772 - Predictive Analytics and Modeling
Credits: 4
The course introduces students to commonly used predictive analytics methods and necessary programming with a focus on regression analysis, classification, and model building. The course coverage is supported using real data applications and illustrations. The topics include linear and non-linear regression model building/selection, residual analysis, search algorithms, generalized linear models/classification, and applied machine learning methods for business use.
Prerequisite(s): ADMN 510 with a minimum grade of C- or MATH 539 with a minimum grade of C- or MATH 540 with a minimum grade of C-.
Grade Mode: Letter Grading

DS 774 - AI and Emerging Technologies in Business
Credits: 4
This course immerses students in the intersecting realms of technology and business. Students will explore key domains such as Artificial Intelligence, Cybersecurity, Global e-Business, Application Design, and Enterprise Systems, engaging in a hands-on, collaborative curriculum. Students will develop a strategic perspective on using IT innovations to drive business value, tackle real-world challenges, and build in-demand skills for dynamic technology careers.
Prerequisite(s): ADMN 410 with a minimum grade of C-.
Grade Mode: Letter Grading

DS 775 - Corporate Project Experience
Credits: 4
Provides real-life experience in organizations. Work in groups on information systems and/or business analytics projects identified by sponsoring organizations. Integrate concepts and skills learned in prior business, analytics, and information systems courses. Learn project management concepts, work with project management tools, and use presentation techniques. Two ISBA Electives required prior to taking this course.
Attributes: Writing Intensive Course
Prerequisite(s): DS 673 with a minimum grade of C-.
Grade Mode: Letter Grading

DS 799H - Honors Thesis in Decision Sciences
Credits: 4
Supervised research leading to the completion of an honors thesis or project in decision sciences; required for graduation from the honors program in business administration.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Digital Language Arts (DLA)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

No courses are currently active in the course inventory for this subject prefix.

Earth Sciences (ESCI)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ESCI 400 - First-year Experience
Credits: 1
Meet your peers, connect with faculty, and discover key resources in the Department of Earth Sciences. Through weekly sessions, we'll explore exciting research being undertaken in the department, professional opportunities, and campus support while building your ESCI cohort. Required for all first-semester Earth Science majors.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

ESCI 401 - Dynamic Earth
Credits: 4
In this course we study the minerals, rocks and fluids which make up the Earth; the landforms on the surface of the Earth such as mountains, flood plains and stratovolcanoes; and processes such volcanism, earthquakes, erosion and glaciation that create and alter them. The rock cycle and plate tectonics are used to integrate activity at the surface of the Earth with processes in the Earth's interior. Campus field exercises. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Mutual Exclusion: No credit for students who have taken ESCI 409.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 402 - Earth History
Credits: 4
Course provides knowledge and skills necessary to interpret, understand, and appreciate the Earth's 4.6 billion-year history. The first third of the course introduces basic principles, including geological materials, plate tectonics, geological time, fossil preservation, and biological evolution. The remainder of the course tells the story of Earth history through case studies that illustrate scientific methods used to reconstruct critical events in our planet's evolution through time. Topics include the origin of the Earth, the Cambrian explosion of life, building of the Appalachians, assembly of Pangaea, the rise and fall of dinosaurs, the formation of the Rocky Mountains, mammalian evolution, human origins, and Pleistocene glaciation. Students gain experience in making geological observations through laboratory exercises and during one afternoon field trip. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 405 - Global Environmental Change
Credits: 4
Human activity rivals nature as an agent of change in the global environment. Explores evidence of environmental degradation in Earth's crust, hydrosphere, and atmosphere; considers prospects for future sustainable human health, diversity, and economic development. Problem solving through critical analysis of environmental variables.
Attributes: Physical Science(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 409 - Geology and the Environment
Credits: 4
Environmental impact of geologic processes; natural hazards, landslides, earthquakes, volcanoes, flooding, erosion, and sedimentation; land exploitation and site investigations; environmental considerations of water-supply problems; the recovery of energy and mineral resources. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Mutual Exclusion: No credit for students who have taken ESCI 401.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 410 - Earth Hazards
Credits: 4
Introductory-level physical science course concerning Earth processes that impact humanity, with natural disasters as the focus. Topics include the causes and effects of earthquakes, tsunamis, volcanic eruptions, floods, and landslides. The course covers basic concepts of physical geology using hands-on-activities, small-group discussions, and in-class demonstrations and is intended for students with little or no previous experience in Earth sciences.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 420 - Our Solar System
Credits: 4
Course focuses on the nature and formation of our solar system and the planets associated bodies it contains, with emphasis on the physical and chemical processes significant in the system's origin and evolutionary history. Our approach provides the basis for understanding key differences between the Earth-like terrestrial planets and those farther out in the solar system (the gas giants). We also explore recent discoveries on Mars and moons of the gas giant planets and their implications for the search for life elsewhere in our solar system.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 444A - Philosophy of Earth Science
Credits: 4
Course provides an introduction to the discipline of Philosophy of Science, but from an Earth Science perspective. Considers various philosophical perspectives on the nature of science and scientific progress, drawing from works by thinkers such as Aristotle, Popper, Kuhn and Lakatos. Particular attention is given to the following questions: What is scientific knowledge? Is the acquisition of scientific knowledge a rational process? And, what makes some scientific discoveries "revolutionary"? These questions are considered using examples from the history of scientific progress in the Earth Sciences, focusing on groundbreaking discoveries such as the age of the earth, the evolution of organisms as observed in the fossil record, sea-floor spreading, and modern-day global warming.
Attributes: Environment,TechSociety(Disc); Inquiry (Discovery)
Grade Mode: Letter Grading

ESCI 451 - Earth in Film
Credits: 4
Introductory-level focusing on interactions between Earth system and its inhabitants, with special emphasis on understanding societal implications of Earth system processes. Topics include Earth's interior processes, volcanism, earthquakes, climate change, storms, tornadoes, and biological change. Students are expected to learn about Earth system processes and critique cinematic portrayal of such processes. Taken together this approach affords building a foundation in the natural sciences and provides insights into societal portrayal of scientific ideas.
Attributes: Physical Science(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 501 - Introduction to Oceanography
Credits: 4
Introduces students to the four oceanographic disciplines: the geology of the ocean basins, including the creation of oceans and continents. The physics of the seas, including the origin of the ocean currents and their effect on the Earth's climate. The chemistry of the ocean waters, including how the distribution of elements reflects circulation and biology. The life in the ocean, including animals, plants and microbes, and humanity's influence on them. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery); Inquiry (Discovery)
Mutual Exclusion: No credit for students who have taken SCI 480.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 502 - Beaches and Coasts
Credits: 4
Introductory-level physical science course on ocean, air, and landform dynamics affecting beaches and coasts, with considerations of natural processes associated with waves and currents, wind and rain, sediments and rocks, and ecology. Emphasis is placed on impacts on ecosystem and human health, the economics of coastal industry, and consequences of pollution and engineering practices. Topics are approached via real world examples, small-group discussions, and field trips to local sites. Recitation.
Attributes: Physical Science(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 512 - Principles of Mineralogy
Credits: 4
Minerals record variations in chemistry, pressure, temperature, and time in the Earth. This course emphasizes minerals and mineral assemblages in rocks, sediments and soils; their identification, symmetry, chemistry, equilibria, and physical properties. Introduction to x-ray diffraction and optical techniques. Special fee for field trips. Lab.
Prerequisite(s): CHEM 403 with a minimum grade of D- or CHEM 405 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 514 - Introduction to Climate
Credits: 3
The climate as a system controlled by the fluid, chemical, geological, and biological dynamics of the earth. Investigation of natural and man-made climate change over the period of 100 to 100 million years, including the greenhouse effects, tectonic climate forcing, astronomic (Milankovitch) cycles, deep ocean circulation, and biological feedback. How past climate is measured.
Prerequisite(s): ESCI 401 with a minimum grade of D- or ESCI 409 with a minimum grade of D- or ESCI 402 with a minimum grade of D- or ESCI 501 with a minimum grade of D-.
Grade Mode: Letter Grading

ESCI 530 - Geological Field Methods
Credits: 4
An introduction to basic geologic field mapping of bedrock and surficial materials using pace and compass, surveying and GPS techniques. Observational data plotted on topographic maps and/or aerial photographs, accompanied with stratigraphic measurements and sampling sites where appropriate, provide the basis for interpretative maps, cross sections and written reports and a field context for more advanced Earth sciences course work and independent research. One weekend field trip to western or northern New England.
Attributes: Writing Intensive Course
Prerequisite(s): (ESCI 401 with a minimum grade of D- or ESCI 409 with a minimum grade of D-) and ESCI 402 with a minimum grade of D-.
Equivalent(s): ESCI 534
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 534 - Techniques in Environmental Sciences
Credits: 3
Elementary mapping and monitoring methods. Map interpretation, preparation of maps; survey techniques including pace and compass, leveling, and global positioning systems; environmental monitoring. Field lab. Cannot receive credit if taken after receiving credit for ESCI 530 or NR 542.
Attributes: Writing Intensive Course
Equivalent(s): ESCI 530, NR 542
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 561 - Landscape Evolution
Credits: 4
This course focuses on the processes that shape the Earth's surface. Lectures discuss the development and evolution of landscapes in a wide variety of climatic and geologic settings, with an emphasis on understanding the processes that create surficial deposits and landforms. Labs involve topographic and digital map interpretation, geomorphic data analysis, and short field exercises. Students also gain practical experience in geomorphic research by teaming up and completing a required term project. During the final week of classes, student research teams present their findings to the class.
Prerequisite(s): ESCI 401 with a minimum grade of D- or ESCI 402 with a minimum grade of D- or ESCI 409 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 614 - Introduction to Petrology
Credits: 0 or 4
Description, classification and formation of igneous, sedimentary, and metamorphic rocks in the field, hand specimen, and thin section. Lab and field trips.
Prerequisite(s): (ESCI 401 with a minimum grade of D- or ESCI 409 with a minimum grade of D- or ESCI 402 with a minimum grade of D- or ESCI 501 with a minimum grade of D-) and ESCI 512 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 630 - Earth's Crust: Formation and Deformation
Credits: 4
In this course students will learn to identify the major rock types of Earth's crust, discuss how they form and learn to identify and measure geologic strain indicators in rocks and use them to interpret the paleo- or modern stress fields responsible for their deformation. Students will learn to portray and visualize petrologic and structural data sets on stereonets, geologic maps, and in cross sections.
Prerequisite(s): ESCI 512 with a minimum grade of D- or NR 501 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 631 - Structural Geology
Credits: 4
Structural units of the Earth's crust and mechanics of their formation. Lab and fieldwork.
Prerequisite(s): ESCI 530 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 633 - Sea Level Rise and Fall
Credits: 4
Explore sea-level change from the origin of Earth's oceans to today's climate crisis. Examine the connection between solid-Earth dynamics and past climate. Learn to analyze geological and instrumental records, model sea-level processes, and consider archaeological and societal impacts. Through case studies and hands-on projects, we examine how Earth processes and human experiences shape our understanding of past, present, and future sea-level change. Course has a lab component.
Prerequisite(s): (MATH 426 (may be taken concurrently) with a minimum grade of D- or MATH 426H (may be taken concurrently) with a minimum grade of D-) and (PHYS 407 (may be taken concurrently) with a minimum grade of D- or PHYS 407S (may be taken concurrently) with a minimum grade of D- or PHYS 407H (may be taken concurrently) with a minimum grade of D-).
Grade Mode: Letter Grading

ESCI 642 - Biogeosciences in the Earth System
Credits: 3
This interdisciplinary course applies concepts from chemistry, physics, biology and geology to understand biogeochemical cycles in the Earth system. Course topics includes terrestrial, ocean and freshwater environments; water and energy cycles; carbon, nitrogen, phosphorous and sulfur cycles; biogeochemical cycles through Earth history and a synthesis of how humans have impacted the Earth system. Students will use quantitative methods to explore relationships between causes and effects, positive and negative feedbacks, and thresholds in the Earth systems.
Prerequisite(s): (MATH 426 with a minimum grade of D- or MATH 424B with a minimum grade of D-) and (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D- or NR 561 with a minimum grade of D-).
Grade Mode: Letter Grading

ESCI 654 - Fate and Transport in the Environment
Credits: 4
An introduction to the basic processes controlling the migration and transformation of chemicals in surface water, groundwater, and the atmosphere, including advection, diffusion, dispersion, retardation, and chemical reaction. Extensive practice with quantitative problem solving in the environmental sciences, including constructing and using box models.
Prerequisite(s): (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D- or NR 561 with a minimum grade of D-) and (MATH 425 with a minimum grade of D- or MATH 424B with a minimum grade of D-).
Grade Mode: Letter Grading

ESCI 690 - Capstone & Professional Development
Credits: 1
Students in ESCI 690 will develop (via participation, assignments and question-asking) insights into potential capstone and post-graduate career and academic opportunities in the Earth Sciences. The course is designed to help students gain experience in learning different ways of communicating scientific research and material to a variety of audiences. Finally, students also expected to develop, collaboratively with a capstone mentor, a capstone plan.
Grade Mode: Credit/Fail Grading

ESCI 701 - Quantitative Methods in Earth Sciences
Credits: 4
Introduces quantitative tools necessary for upper level Earth Science courses. Includes basic statistical descriptions of spatially and temporally varying data, curve fitting, and time-series analysis with emphasis on atmospheric, oceanic and terrestrial data sets. Students learn to construct simple numerical models of Earth Systems. Instruction in data analysis and modeling in Python.
Prerequisite(s): MATH 426 with a minimum grade of D- and (ESCI 401 with a minimum grade of D- or ESCI 402 with a minimum grade of D- or ESCI 409 with a minimum grade of D- or ESCI 501 with a minimum grade of D- or ESCI 514 with a minimum grade of D- or OE 490 with a minimum grade of D-).
Grade Mode: Letter Grading

ESCI 705 - Principles of Hydrology
Credits: 4
Basic physical principles important in the land phase of the hydrologic cycle, including precipitation, snowmelt, infiltration and soil physics, evapotranspiration, and surface and subsurface flow to streams. Problems of measurement and aspects of statistical treatment of hydrologic data. Field trips. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): ESCI 654 with a minimum grade of D- or ((MATH 425 with a minimum grade of D- or MATH 424B with a minimum grade of D-) and (PHYS 401 with a minimum grade of D- or PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-)).
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 710 - Groundwater Hydrology
Credits: 4
Principles for fluid flow in porous media with emphasis on occurrence, location, and development of groundwater but with consideration of groundwater as a transporting medium. Major topics include well hydraulics, regional groundwater flow, exploration techniques, and groundwater modeling. Laboratory exercises involve use of fluid, electrical, and digital computer models to illustrate key concepts. Lab.
Prerequisite(s): ESCI 654 with a minimum grade of D- or CEE 650 with a minimum grade of D- or NR 504 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 715 - Hydrologic Data Analysis
Credits: 4
Introduction to data analysis techniques necessary to quantify and explore terrestrial water budgets, including rates of precipitation, evapotranspiration, and runoff; recurrence intervals; and construction of rating curves. Topics will include data importation, data cleaning, data manipulation, and curve-fitting, with an emphasis on visual and exploratory analysis. Project-based labs will involve active application of newly learned techniques to publicly available USGS and NOAA datasets. Students will gain experience using Python Pandas and artificial intelligence (AI) coding tools for hydrological applications. No programming experience required.
Grade Mode: Letter Grading

ESCI 720 - Ocean Measurements Lab
Credits: 4
Measurements of fundamental ocean processes and parameters. Emphasizes understanding typical coastal and estuarine measurements their applications, and the use of acquired data in terms of the effects on structures and processes in the ocean.
Equivalent(s): OE 710
Grade Mode: Letter Grading

ESCI 726 - Igneous and Metamorphic Petrology
Credits: 4
This course focuses on the origin and evolution of igneous and metamorphic rocks from field, petrographic mineral chemistry, experimental, and theoretical studies. Igneous systems include volcanic and plutonic suites, with emphasis on mineralogic records of magma chamber systematics. Metamorphic systems include pelitic, mafic, and calc sillcate rocks, with special emphasis on closed- and open-system reactions, mutl-systems, reaction space, and pressure-temperature-time paths. Field trips. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): ESCI 614 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 734 - Global Geophysics
Credits: 4
This course focuses on the structure of the Earth and dynamic processes within it. Topics include: plate tectonics, earthquakes and seismic waves, mantle convection, rheology and ice age dynamics, Earth's gravity field and geodesy, and the geodynamo. Lab.
Prerequisite(s): MATH 426 with a minimum grade of D- and PHYS 408 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 741 - Geochemistry
Credits: 4
Course focuses on the application of chemical principles to solve problems in the Earth sciences. Students learn the chemical tools of thermodynamics and kinetics, element partitioning, conservation of mass, and isotope geochemistry. Explore geochemical properties/ processes in the deep Earth and the Earth surface, atmosphere and marine systems, and cosmo-chemistry and investigate the interactions between these components of the Earth system. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): (MATH 424A with a minimum grade of D- or MATH 424B with a minimum grade of D- or MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-) and (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 745 - Isotope Geochemistry
Credits: 4
Course focuses on the application of radiogenic, radioactive and stable isotopes to improve students' knowledge about the processes and timescales relevant to the formation of the planet and solar system, the evolution of the Earth system and interactions in the hydrosphere and biosphere. Topics include geochronology, tracer applications, Earth surface applications, as well as applications in the hydrosphere and biosphere. Systems discussed include the classic radiogenic systems (K-Ar, Rb-Sr, Sm-Nd, Lu-Hf and U-Th-Pb), traditional (H, C, N, O) as well as nontraditional (e.g., Mg, Ca, Fe) stable isotope systems, and radioactive isotopes (e.g., radiocarbon). Course consists of lecture, where students are exposed to these applications, and a lab section to work through any questions on the homework assignments, discuss relevant papers from the literature, and carry out a project. Lab.
Prerequisite(s): (MATH 424A with a minimum grade of D- or MATH 424B with a minimum grade of D- or MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-) and (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 747 - Aqueous Geochemistry
Credits: 4
The chemical processes that determine the composition of aquatic systems such as rivers, lakes, groundwater and the ocean. The goal is to quantitatively understand the behavior of inorganic species such as carbon dioxide, nutrients, trace metals and inorganic pollutants in natural waters. Topics include, acid-based equilibria, carbonate chemistry, reduction-oxidation reactions, organic complexation and mineral precipitation and dissolution. Lab. Prereq: one year college chemistry or geochemistry or permission.
Prerequisite(s): (MATH 424A with a minimum grade of D- or MATH 424B with a minimum grade of D- or MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-) and (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 749W - Ocean Biogeochemistry
Credits: 3
This course focuses on the elemental cycles of the major bioactive elements carbon, nitrogen, phosphorus, oxygen, and iron in the ocean. Topics include the biological and microbial carbon pumps, nitrogen fixation, iron fertilization, the carbon-climate system, ocean acidification, and deoxygenation. This course will provide insight and corresponding critical review of the current outstanding scientific questions being pursued by ocean biogeochemists. Students will become familiar with data analysis and visualization using open-source software.
Attributes: Writing Intensive Course
Prerequisite(s): ESCI 501 with a minimum grade of D-.
Grade Mode: Letter Grading

ESCI 752 - Chemical Oceanography
Credits: 3
This course investigates the physical and biogeochemical processes that determine the composition of seawater. Topics include biological effects on chemistry, ocean nutrient cycles, air-sea gas exchange, radiogenic and stable isotopes as tracers of ocean processes, sediment and trace-metal chemistry.
Prerequisite(s): (MATH 424A with a minimum grade of D- or MATH 424B with a minimum grade of D- or MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-) and (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Grade Mode: Letter Grading

ESCI 754 - Sedimentology
Credits: 4
This course focuses on modern sedimentary processes and ancient sedimentary records through the examination, identification, and interpretation of sediments and sedimentary rocks. Topics such as sediment transport mechanisms, depositional environments, and time in sedimentary records will provide a strong framework for any student studying Earth processes and sedimentary systems. Lab and field trips.
Prerequisite(s): (ESCI 401 with a minimum grade of D- or ESCI 402 with a minimum grade of D- or ESCI 409 with a minimum grade of D- or ESCI 501 with a minimum grade of D-) and ESCI 512 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 756 - Geotectonics
Credits: 3
The geological record of plate tectonics past and present. The first part of the course focuses on modern tectonic settings with an emphasis on plate geometries, geodynamical processes, and sedimentary products. The second part of the course focuses on reconstructing ancient tectonic settings with an emphasis on methodology (paleomagnetism, basin analysis, provenance) and case studies (e.g. India-Asia collision). Field trip.
Attributes: Writing Intensive Course
Prerequisite(s): ESCI 614 with a minimum grade of D- or ESCI 631 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 758 - Introductory Physical Oceanography
Credits: 3
Descriptive treatment of atmosphere-ocean interaction; general wind-driven and thermo-haline ocean circulation; waves and tides; continental shelf and near-shore processes; instrumentation and methods used in ocean research. Simplified conceptual models demonstrate the important principles.
Prerequisite(s): (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-) and ESCI 501 with a minimum grade of D-.
Grade Mode: Letter Grading

ESCI 759 - Geological Oceanography
Credits: 4
Major geological features and processes of the ocean floor; geological and geophysical methods; composition of the earth, sedimentary processes, plate tectonics and paleoceanography.
Attributes: Writing Intensive Course
Prerequisite(s): ESCI 501 with a minimum grade of D-.
Grade Mode: Letter Grading

ESCI 760 - Paleoceanography
Credits: 3
This course introduces the basic principles of paleoceanography, such as the preservation of ocean history in sediment archives and the analysis/interpretation of paleoceanographic data. The course focuses on the capabilities and limitations of paleoceanographic techniques, and empowers students to critically assess the strengths and weaknesses of results presented in scientific journals. Topics include Milankovitch cycles, faunal assemblages, temperature and circulation proxies, linear and non-linear responses to climate forcings, abrupt climate events, atmospheric teleconnections and monsoons.
Prerequisite(s): ESCI 514 with a minimum grade of D- and (CHEM 404 with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Grade Mode: Letter Grading

ESCI 762 - Glacial Geology
Credits: 4
This course covers almost everything you always wanted to know about glaciers. More specifically, the course provides a survey of glacier dynamics and processes, with an emphasis on understanding the origin and significance of glacial deposits and landforms. The first half of the course examines the physics of glaciers, and the second half focuses on glacial geologic processes. Lectures discuss glaciers and ice sheets as key agents of geomorphic change and their central role in the Earth's climate system. Labs involve analysis of glaciological data, glacial-geomorphic map interpretation, and short field exercises. A required term project involves a written report and class presentation on a topic of active research in glacial geology.
Attributes: Writing Intensive Course
Prerequisite(s): ESCI 561 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ESCI 764 - Spectral Analysis of Geophysical Time Series Data
Credits: 4
This course considers basic exploratory techniques and in-depth spectral analysis for estimation with geophysical time series data, including calculations of confidence intervals and significance testing. This course prepares students for interpreting time series data with science and engineering applications. Topics include sampling theory, filtering, statistics, probability, spectral analysis, and empirical orthogonal functions. Students gain experience in code-writing for the analysis of time series data.
Prerequisite(s): MATH 426 with a minimum grade of D-.
Equivalent(s): OE 764
Grade Mode: Letter Grading

ESCI 765 - Paleoclimatology
Credits: 3
Course reviews the study of past changes in the Earth's climate system. Main discussion topics include astronomical theories of ice ages, Quaternary dating methods, Antarctic and Greenland ice core records, greenhouse gases, marine-based climate proxies, glacial mega-floods, and linkages between ocean circulation and abrupt climate change. Emphasis on climate variability during the Quaternary period (the last approximately 2.6 million years), a time interval dominated by cycles of global glaciation. Lectures include discussion of recent and emerging scientific papers in order to keep pace with the latest findings in paleoclimatic research.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ESCI 770 - Geodesy for Ocean Mapping
Credits: 3
Ocean mapping requires precise positioning and navigation. For this we need to precisely know Earth's shape, gravity field, and orientation in space. Data used for this purpose include satellite-based positioning, gravity measurements, and ground surveys. Reference frames can then be created allowing the integration of geometric observations for the creation of mapping products.
Prerequisite(s): (MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-) and (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D- or PHYS 401 with a minimum grade of D-).
Grade Mode: Letter Grading

ESCI 771 - Positioning for Ocean Mapping
Credits: 4
Ocean mapping necessitates accurate positioning and navigation, which, in turn, rely on a comprehensive grasp of measurement methodologies. This course will comprehensively examine various positioning techniques, including spirit leveling, total stations, Global Navigation Satellite Systems (GNSS), inertial navigation systems (INS), and underwater acoustic positioning systems. Emphasis will be placed on the observational methodologies associated with each technology, along with the propagation of observation uncertainty.
Prerequisite(s): (ESCI 770 with a minimum grade of D- or OE 770 with a minimum grade of D-) and (MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-) and (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D- or PHYS 401 with a minimum grade of D-).
Equivalent(s): OE 771
Grade Mode: Letter Grading

ESCI 777 - GIS for Earth & Environmental Sciences
Credits: 4
Geospatial technologies provide insight into spatial and temporal aspects of environmental and earth systems. Students will master basic skills of a geographical information system. Weekly laboratory exercises will build upon a foundation of conceptual knowledge and data processing skills. Focus on applied research questions and projects will be addressed. The course will use the opensource program QGIS. Additional work will develop programming skills using the python language. Programming background is not a requirement but beneficial.
Grade Mode: Letter Grading

ESCI 778 - Remote Sensing Earth & Environmental Sciences
Credits: 4
Remote sensing provides insight into spatial and temporal aspects of environmental and Earth systems. Students will examine digital image processing techniques, different sensor and platform technologies, and new trends and frontiers in remote sensing science. Weekly laboratory exercises build upon conceptual knowledge, data processing skills, and development of programming skills. Applied research questions and projects will use Google Earth Engine. Hyperspectral, lidar, and unmanned aerial systems will be presented.
Grade Mode: Letter Grading

ESCI 795 - Topics
Credits: 1-4
Geologic, hydrologic, and oceanographic problems and independent studies by means of conferences, assigned readings, and field or laboratory work fitted by ESCI faculty to individual student needs; or new or specialized courses. Topics include geochemistry; geomorphology; geophysics; glaciology; groundwater; structural and regional geology; crystallography; mineralogy; petrology; thermodynamics; ore deposits; earth resource policy; paleontology; sedimentation; stratigraphy; water resources management; chemical, physical, and geological oceanography; earth systems. Also, senior synthesis and earth science teaching methods.
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 3 times.
Grade Mode: Letter Grading

ESCI 796 - Topics
Credits: 1-4
Geologic, hydrologic, and oceanographic problems and independent studies by means of conferences, assigned readings, and field or laboratory work fitted by ESCI faculty to individual student needs; or new or specialized courses. Topics include geochemistry; geomorphology; geophysics; glaciology; groundwater; structural and regional geology; crystallography; mineralogy; petrology; thermodynamics; ore deposits; earth resource policy; paleontology; sedimentation; stratigraphy; water resources management; chemical, physical, and geological oceanography; earth systems. Also, senior synthesis and earth science teaching methods. Special fee on some topics.
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 3 times.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

ESCI 799 - Senior Thesis
Credits: 1-4
Students work under the direction of a faculty sponsor to plan and carry out independent research resulting in an oral presentation and a written thesis. Research projects should include the development of a research question; collection analysis, and synthesis of data; and interpretation and presentation of results. A copy of the written thesis must be submitted to the Chair of the Department of Earth Sciences prior to graduation. A total of 4 credits is required and may be completed over multiple semesters.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

EcoGastronomy (ECOG)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ECOG 401 - Introduction to Ecogastronomy
Credits: 0 or 4
This interdisciplinary course introduces students to the principles and practices of EcoGastronomy. It provides students with a foundation for understanding the connections among food production, ecology, ethics, cuisine, nutrition and health within the framework of sustainability. The course includes guest lectures, class discussion, film reviews, activities, and food tastings.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

ECOG 695 - Independent Analysis
Credits: 1-4
Study and research project for students to advance knowledge in EcoGastronomy fields.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ECOG 696 - Supervised Student Teaching Experience
Credits: 4
Participants are expected to perform such functions as attending classes, leading discussion groups, assisting faculty, presenting information in undergraduate courses that they have successfully completed, holding office hours, grading papers and exams. Enrollment is limited to juniors and seniors who have had above average GPAs.
Prerequisite(s): ECOG 401 with a minimum grade of C-.
Grade Mode: Credit/Fail Grading

ECOG 701 - EcoGastronomy Capstone
Credits: 2-4
This is a one to two-semester course in which students will synthesize their EcoGastronomy experience with their undergraduate education, including their primary major, and will explore an integrated outlook on their professional future. Filed trips, guest lecturers, experimental activities, and related readings and research will provide the foundation for the completion of a portfolio. A research paper is presented at the Undergraduate Research Conference in the spring.
Attributes: Writing Intensive Course
Prerequisite(s): ECOG 401 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 1 time.
Grade Mode: Letter Grading

Economics (ECN) CPSM

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ECN 410 - History of Literary Economics
Credits: 4
An examination of the contributions of fiction writers to the history of economic thought. Novels and short stories are analyzed in conjunction with studying influential and heterodox schools of economic thought. Fiction writers will vary by semester (e.g., Mark Twain, Edith Wharton, Charlotte Perkins Gilman, Theodore Dreiser, Jack London, Ayn Rand, F. Scott Fitzgerald and Louisa May Alcott). Schools of economic thought examined include critics as well as advocates of free market capitalism.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

ECN 411 - Introduction to Macroeconomic Principles
Credits: 4
Studies how an economy functions. Develops measures and theories of economic performance to study such issues as unemployment, inflation, international trade and finance, and the level of national production. Examines government policies designed to correct for unemployment and inflation with close attention to the use of fiscal and monetary policies in the U.S.
Attributes: Social Science (Discovery)
Equivalent(s): ECN 411W, ECON 401, ECON 401H
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

ECN 411W - Introduction to Macroeconomic Principles
Credits: 4
Studies how an economy functions. Develops measures and theories of economic performance to study such issues as unemployment, inflation, international trade and finance, and the level of national production. Examines government policies designed to correct for unemployment and inflation with close attention to the use of fiscal and monetary policies in the U.S.
Attributes: Social Science (Discovery); Writing Intensive Course
Equivalent(s): ECN 411, ECON 401, ECON 401H
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

ECN 412 - Introduction to Microeconomic Principles
Credits: 4
Studies the behavior and interaction of fundamental decision-making units in an economy, especially consumers and business firms. Applies such economic principles as scarcity, supply and demand, and elasticity to a variety of social issues. Topics include the resource allocation problems of households and business firms, economic theories of social problems (such as crime, divorce, and discrimination), and the economic implications of government policies affecting the environment, the workplace, and industrial organization.
Attributes: Social Science (Discovery)
Equivalent(s): ECN 412W, ECON 402, ECON 402H, EREC 411, NR 411
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

ECN 412W - Introduction to Microeconomic Principles
Credits: 4
Studies the behavior and interaction of fundamental decision-making units in an economy, especially consumers and business firms. Applies such economic principles as scarcity, supply and demand, and elasticity to a variety of social issues. Topics include the resource allocation problems of households and business firms, economic theories of social problems (such as crime, divorce, and discrimination), and the economic implications of government policies affecting the environment, the workplace, and industrial organization.
Attributes: Social Science (Discovery); Writing Intensive Course
Equivalent(s): ECN 412, ECON 402, ECON 402H, EREC 411, NR 411
Mutual Exclusion: No credit for students who have taken ECON 402, ECON 402A, ECON 402H, EREC 411.
Grade Mode: Letter Grading

ECN 640 - Business Law and Economics
Credits: 4
A study of the legal environment of business. Emphasis is on using economic analysis to examine laws of property, contract, and tort affecting business. Includes the ethical foundations of law and ethical issues involving business. Specific topics may include commercial free speech, white collar crime and managerial responsibility, product liability, cyberlaw, copyright, trademark and patent law.
Attributes: Writing Intensive Course
Prerequisite(s): BUS 400 with a minimum grade of D- and ECN 412 with a minimum grade of D-.
Equivalent(s): ECN 540
Grade Mode: Letter Grading

ECN 650 - Economics for Managers
Credits: 4
Examines how economic principles can be applied to resource allocation problems confronted by managers in a variety of industry settings. Emphasis on both theory and application. Topics include cost analysis, production decisions, and pricing policies of business managers within perfectly competitive, monopolistic, oligopolistic, and monopolistically competitive environments.
Prerequisite(s): BUS 400 with a minimum grade of D- and ECN 412 with a minimum grade of D-.
Grade Mode: Letter Grading

Economics (ECO) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ECO 470 - Principles of Economics
Credits: 4
Economics is the study of how we coordinate our wants and needs as a society. The economic perspective includes three main concepts: scarcity and choice, rational behavior, and marginal analysis. Pertinent and relevant examples of current events may be used to illustrate economic principles. Students will relate international trade and trade policies to the concept of comparative advantage and the impact on production of goods and services in various countries. This survey course addresses both macroeconomic and microeconomic principles.
Attributes: HumanBehavSocial Sys (Gen Ed)
Equivalent(s): ECO 512G
Grade Mode: Letter Grading

ECO 580 - International Economics
Credits: 4
This course is an in-depth look at how the international market for goods and services works. Students may investigate the workings of tariffs and non-tariff restrictions on trade, trade regulations, and industrial policies, first in the developed economies and then in the developing countries. Regional and multilateral trade agreements are examined. The course may examine an investigation of international monetary relationships, including balance of payments, foreign exchange and exchange rate of determinants, and how balance of payments adjustments are made.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): ECO 470 with a minimum grade of D- or ECO 512G with a minimum grade of D-.
Equivalent(s): ECO 600G
Grade Mode: Letter Grading

ECO 635 - Economics of Artificial Intelligence
Credits: 4
This course examines Artificial Intelligence (AI) as an enhancement to human intelligence in business practice in terms of various senses and processes such as language, vision, analysis and decision-making. This course has a focus on developing strategies for maximizing the revolutionary power of AI as it impacts functions within businesses and economies. Selected topics may include productivity, prediction, innovation, labor, leadership and privacy. The primary course objective is to design an AI based plan for successfully leading your life, your career and your organization. Students may evaluate how AI is being employed in the private and public sectors such as in healthcare, engineering, culture, entertainment, hospitality, agriculture, law, journalism, politics, and in government.
Attributes: HumanBehavSocial Sys (Gen Ed)
Equivalent(s): ECO 605G
Grade Mode: Letter Grading

ECO 707 - Resource Economics
Credits: 4
This course examines sustainable resource use and acquisition. In an ever-changing, increasingly volatile global environment, consistent access to quality labor, materials, and political capital is paramount. Real-world data analysis and the use of evidence-based models enables forward-thinking organizations to identify the essential resources required for their progress. The interdependence among material resources, human talent, and political capital may also be addressed.
Prerequisite(s): ECO 470 with a minimum grade of D- or ECO 512G with a minimum grade of D-.
Equivalent(s): ECO 607G
Grade Mode: Letter Grading

ECO 710 - Behavioral Economics
Credits: 4
Behavioral economics integrates the business of life, which is economics, with the science of human behavior, which is psychology. The economics model holds that people are rational and act in their own best interests. Psychology focuses on the cognitive, cultural, and biological influences in decision-making. This course may cover the insights of behavioral economics toward developing solutions to the real-world challenges experienced in management, marketing, IT, entrepreneurship, strategy, communications, finance, and other domains.
Prerequisite(s): ECO 470 with a minimum grade of D- or ECO 512G with a minimum grade of D- or ECO 635 with a minimum grade of D- or ECO 605G with a minimum grade of D- or PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D-.
Equivalent(s): ECO 610G
Grade Mode: Letter Grading

Economics (ECON)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ECON 401 - Principles of Economics (Macro)
Credits: 0 or 4
Basic functions of the United States economy viewed as a whole; policies designed to affect its performance. Economic scarcity, supply and demand, the causes of unemployment and inflation, the nature of money and monetary policy, the impact of government taxation and spending, the federal debt, and international money matters. ECON 401A emphasizes applications to the international economy. ECON 401H is open to students in the Honors Program.
Attributes: Social Science (Discovery)
Equivalent(s): ECN 411, ECN 411W, ECON 401H
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

ECON 401H - Honors/Principles of Economics (Macro)
Credits: 4
Basic functions of the United States economy viewed as a whole; policies designed to affect its performance. Economic scarcity, supply and demand, the causes of unemployment and inflation, the nature of money and monetary policy, the impact of government taxation and spending, the federal debt, and international money matters. ECON 401A emphasizes applications to the international economy. ECON 401H is open to students in the Honors Program.
Attributes: Honors course; Social Science (Discovery); Inquiry (Discovery)
Equivalent(s): ECN 411, ECN 411W, ECON 401
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

ECON 402 - Principles of Economics (Micro)
Credits: 4
Functions of component units of the economy and their interrelations. Units of analysis are the individual consumer, the firm, and the industry. Theory of consumer demand and elasticity, supply and costs of production, theory of the firm under conditions of perfect and imperfect competition, demand for and allocation of economic resources, general equilibrium, and basic principles and institutions of international trade. ECON 402A emphasizes applications to the international economy. ECON 402H is open to students in the Honors Program.
Attributes: Social Science (Discovery)
Equivalent(s): ECN 412, ECN 412W, ECON 402H, EREC 411, NR 411
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

ECON 402H - Honors/Principles of Economics (Micro)
Credits: 4
Functions of component units of the economy and their interrelations. Units of analysis are the individual consumer, the firm, and the industry. Theory of consumer demand and elasticity, supply and costs of production, theory of the firm under conditions of perfect and imperfect competition, demand for and allocation of economic resources, general equilibrium, and basic principles and institutions of international trade. ECON 402A emphasizes applications to the international economy. ECON 402H is open to students in the Honors Program.
Attributes: Honors course; Social Science (Discovery); Inquiry (Discovery); Writing Intensive Course
Equivalent(s): ECN 412, ECN 412W, ECON 402, ECON 402A, EREC 411, NR 411
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

ECON 501 - Business and Economic History
Credits: 4
This course studies the historical influence of business enterprises on the global development of capitalist economies, their ancient and medieval predecessors, and their modern alternatives. Topics include the impact of climate and disease on economic growth, the rise of manufacturing, the development of financial institutions and markets, innovation and the role of the entrepreneur, the history of slavery and colonialism, and the impact of government policy on business development. Because this is an Inquiry course, each student will pursue a major research project. Does not satisfy Economics Minor requirements.
Attributes: Historical Perspectives(Disc); Inquiry (Discovery)
Grade Mode: Letter Grading

ECON 565 - Predictive Modeling: Data Driven Economic Analysis
Credits: 4
This course expands upon core topics in statistics through the study and practice of data management, data analysis, and statistical programming. Statistical programming and analytical skills are the key components of predictive modeling. Students will develop tools for collecting, organizing, interpreting, presenting, and analyzing business information. As an economics course an emphasis will be placed on how to use data to improve the information needed to make sound economic and business decisions based on marginal analysis.
Prerequisite(s): (ADMN 420 with a minimum grade of C- or ADMN 510 with a minimum grade of C-) and (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-).
Grade Mode: Letter Grading

ECON 605 - Intermediate Microeconomic Analysis
Credits: 4
Analysis of supply and demand. Determination of prices, production, and the distribution of income in noncompetitive situations and in the purely competitive model. General equilibrium.
Prerequisite(s): ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-.
Mutual Exclusion: No credit for students who have taken ECON 606.
Grade Mode: Letter Grading

ECON 606 - Intermediate Microeconomics with Calculus
Credits: 4
Consumer theory. Determination of prices, production, and the distribution of income in perfectly and imperfectly competitive markets. Demand and supply analysis. Welfare analysis of public policies. General Equilibrium. Topics employ calculus.
Prerequisite(s): (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-) and (MATH 424A with a minimum grade of D- or MATH 424B with a minimum grade of D- or MATH 425 with a minimum grade of D-).
Mutual Exclusion: No credit for students who have taken ECON 605.
Grade Mode: Letter Grading

ECON 611 - Intermediate Macroeconomic Analysis
Credits: 4
Macroeconomic measurement, theory, and public policy determination.
Prerequisite(s): (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C-) and (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-).
Grade Mode: Letter Grading

ECON 620 - Topics in Economics
Credits: 4
Special topics cover a variety of areas in economics, often of special interest to the instructor.
Prerequisite(s): (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C-) and (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-).
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

ECON 620W - Topics in Economics
Credits: 4
Special topics cover a variety of areas in economics, often of special interest to the instructor.
Attributes: Writing Intensive Course
Prerequisite(s): (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C-) and (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C-).
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

ECON 625 - Economic History of the United States
Credits: 4
This course studies the development of the U.S. economy from colonial times to the 21st century. The role that institutions, innovations and government policy play in economic development is a central theme of the course. Western settlement, slavery and abolition, the rise of manufacturing and the corporate business, emergence of affluence and consumer society, and the Great Depression are some of the topics addressed.
Prerequisite(s): ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C- or ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-.
Grade Mode: Letter Grading

ECON 626 - Supervised Student Teaching
Credits: 2-4
Participants are expected to perform such functions as leading discussion groups, assisting faculty in undergraduate courses that they have successfully completed. For juniors and seniors with 3.0 or better cumulative GPA. No more than four credits may be earned as an instructional assistant in any one course. Permission of instructor and undergraduate programs office required.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Credit/Fail Grading

ECON 633 - Microfinance
Credits: 4
Microfinance focuses on features of the informal economy in developing countries especially small-scale changes in finance, commerce, technology, and in social and environmental organization that have led to transformational economic breakthroughs. Besides financial services, the course examines innovative customer segments, market-based solutions, the role of government subsidies, a range of development issues, and how to measure success for projects, programs, and institutions.
Grade Mode: Letter Grading

ECON 635 - Money and Banking
Credits: 4
Study of how the financial sectors of globally interconnected economies impact real economic activity. It includes interrelationships of interest rates, exchange rates, expectations, financial markets, financial institutions, central banks, systemic crises, the supply and demand for money and other financial instruments, and an introduction to monetary theory, policy and regulation.
Prerequisite(s): (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C-) and (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-).
Grade Mode: Letter Grading

ECON 645 - International Economics
Credits: 4
Covers both international trade theory and open-economy macroeconomics. Some of the major issues include whether free trade is always preferred to restricted trade, the controversy over industrial policy and how best to structure the international financial system. Students gain an understanding of topics including currency exchange rate movements, and trade policy, among others.
Prerequisite(s): (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C-) and (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-).
Equivalent(s): ECON 645W
Grade Mode: Letter Grading

ECON 652 - Economics of Artificial Intelligence
Credits: 4
This course will provide students with a survey of economic models, applied to Artificial Intelligence (AI). The course is divided into three sections. In the first one, we introduce the concept of AI as a General-Purpose Technology that can improve prediction. In the second part, we look at how improved prediction can help decision-making under uncertainty. Finally, we analyze how AI can impact several aspects of business, society, and in particular the labor market.
Attributes: Writing Intensive Course
Prerequisite(s): ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C- or ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-.
Grade Mode: Letter Grading

ECON 653 - Law and Economics
Credits: 4
Introduces the field of Law and Economics. Focuses on the legal system and the economic consequences of property, contract, tort, criminal law and mediation.
Attributes: Writing Intensive Course
Prerequisite(s): ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-.
Grade Mode: Letter Grading

ECON 654 - Industrial Economics and Business Innovation
Credits: 4
This course will provide students with a survey of economic models in industrial organization, applied to innovation-related issues. The course is divided into three sections. In the first one, we introduce the concept of innovation, its measurement and how it is related to knowledge. In the second part, we look at innovation at the firm level. In particular, we delve into the "knowledge- creating" company and its strategies. Finally, we analyze the structure and evolution of several hi-tech industries, in terms of survival of existing firms and creation of new firms.
Attributes: Writing Intensive Course
Prerequisite(s): (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C-) and (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-).
Grade Mode: Letter Grading

ECON 655 - Innovation in the Global Economy
Credits: 4
This course will provide students with a survey of economic models in international trade, applied to innovation-related issues. The course is divided into three sections. In the first one, we look at the role that industry, universities, and the government play in the national innovation system. In the second part, we look at innovation from an international perspective. In particular, we delve into the relationship between globalization and innovation. Finally, we analyze the role of externalities in the knowledge economy and particularly network effects in the diffusion of new technologies.
Attributes: Writing Intensive Course
Prerequisite(s): (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C-) and (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-).
Grade Mode: Letter Grading

ECON 656 - Labor Economics
Credits: 4
Functioning of labor markets from theoretical and policy perspectives. Labor demand and supply, wages and employment. Welfare programs, human capital, discrimination in the labor market, unions, wage differentials.
Prerequisite(s): (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C-) and (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-) and (ECON 605 with a minimum grade of C- or ECON 606 with a minimum grade of C-).
Grade Mode: Letter Grading

ECON 676 - Economics of Sports
Credits: 4
Focuses on the major economic aspects of North American professional and collegiate sports and special topics like the Olympics, discrimination, and tournament sports drawing from public finance, labor economics, and industrial organization.
Attributes: Writing Intensive Course
Prerequisite(s): ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-.
Grade Mode: Letter Grading

ECON 704 - Economics of Health
Credits: 4
This course in intermediate health economics applies the analytical tools of microeconomics to various issues in health and healthcare. The first half of the course focuses on patient demand, and the second half focuses on provider supply. Topics covered in the former include the demand for health and healthcare, the demand for insurance, externalities associated with certain health behaviors, cost-effectiveness analyses, and health equity considerations. Topics covered in the latter half of the course include the role of nonprofits, provider agency, provider competition versus concentration, insurer behavior, and the effects of government regulation of insurance.
Prerequisite(s): ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or NR 411 with a minimum grade of C-.
Grade Mode: Letter Grading

ECON 706 - Economics of Climate Change
Credits: 4
Explores the economics and public policy of global climate change and develops the economic theory including the concepts of externalities, stock pullutant models, the social discount rate, and complicating factors such as information, uncertainty, technological progress, and risk. Students use economic analysis to compare different policy instruments such as administrative regulation, marketable permits, tax incentives, and direct subsidies. Also covers the political economy of international environmental agreements, including an analysis of the Kyoto Protocol.
Attributes: Writing Intensive Course
Prerequisite(s): ECON 402 with a minimum grade of D- or ECON 402H with a minimum grade of D- or EREC 411 with a minimum grade of D- or NR 411 with a minimum grade of D-.
Grade Mode: Letter Grading

ECON 720 - Economic Problems
Credits: 4
Special topics cover a variety of areas in economics, often of special interest to the instructor.
Prerequisite(s): (ECON 401 with a minimum grade of C- or ECON 401H with a minimum grade of C-) and (ECON 402 with a minimum grade of C- or ECON 402H with a minimum grade of C- or EREC 411 with a minimum grade of C- or NR 411 with a minimum grade of C-).
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

ECON 720W - Economic Problems
Credits: 4
Special topics cover a variety of areas in economics, often of special interest to the instructor.
Attributes: Writing Intensive Course
Prerequisite(s): ECON 401 with a minimum grade of C- and ECON 402 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

ECON 725 - Independent Study
Credits: 1-4
Individual research projects that are student designed. Initial sponsorship of a Paul College faculty member must be obtained followed by approval of Paul advisor and Dean's Office. Special permission required to earn more than 4 credits in one semester. For Paul College Juniors and Seniors with 3.0 or better cumulative GPA.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

ECON 725W - Independent Study
Credits: 1-4
Individual research projects that are student designed. Initial sponsorship of an economics faculty member must be obtained followed by approval of PAUL advisor and dean.'s office. Special permission required to earn more than 4 credits in one semester. For Paul College juniors and seniors in with 3.0 or better cumulative GPA.
Attributes: Writing Intensive Course
Equivalent(s): ECON 695W
Grade Mode: Letter Grading

ECON 726 - Introduction to Econometrics
Credits: 0 or 4
Introduces regression techniques as used in economics and management; estimation and statistical inference in the context of the general linear model; discussion of problems encountered and their solutions; extensions of the general linear model.
Prerequisite(s): (ADMN 420 with a minimum grade of C- or ADMN 510 with a minimum grade of C- or MATH 539 with a minimum grade of C- or BIOL 528 with a minimum grade of C- or EREC 525 with a minimum grade of C- or MATH 644 with a minimum grade of C-).
Grade Mode: Letter Grading

ECON 727 - Advanced Econometrics
Credits: 0 or 4
Method of least squares estimation with treatments for hereogeneity and endogeneity. Method of maximum likelihood estimation. Binary choice models. Panel data models. Survival analysis. Topics employ calculus.
Prerequisite(s): ECON 726 with a minimum grade of C- and (MATH 424A with a minimum grade of D- or MATH 424B with a minimum grade of D- or MATH 425 with a minimum grade of D-).
Grade Mode: Letter Grading

ECON 760 - Game Theory
Credits: 4
Game theory is the study of strategic interactions. In order for a decision-maker to decide the best course of action, he must take into account the actions of others, including how his own behavior influences the thinking and payoffs of others. Game theory helps us develop an understanding of how people actually behave and how they should be advised to behave in strategic situations. Game theory models conflict and cooperation between rational decision-making agents and has applications in a wide variety of areas, including statistical decision theory, artificial intelligence, economics and business, biology, political science and philosophy.
Prerequisite(s): (ECON 605 with a minimum grade of C- or ECON 606 with a minimum grade of C- or ADMN 580 with a minimum grade of C-).
Grade Mode: Letter Grading

ECON 765 - Machine Learning for Economics
Credits: 4
Machine Learning for Economics bridges economic reasoning with the computational power of AI. Rather than treating machine learning as a black box, this course opens it - training students to think like economists who engineer algorithms with purpose and interpretability. Students will learn to use Python to build, test, and explain machine learning models grounded in economic theory and data. The goal is to equip future economists with the skills to not only apply machine learning responsibly, but also to extend and adapt these methods in pursuit of rigorous economic research and policy evaluation.
Prerequisite(s): ECON 606 with a minimum grade of B- and ECON 726 with a minimum grade of B-.
Grade Mode: Letter Grading

ECON 774 - Senior Economics Seminar
Credits: 4
Capstone experience for students enrolled in the Economics B.A. program. Topics and format of the class depends on the interests and expertise of the faculty member and students of the course. The course is organized around a "big" idea and focuses on an important topic that has broad interest and social consequences.
Attributes: Writing Intensive Course
Prerequisite(s): ECON 605 with a minimum grade of C- and ECON 611 with a minimum grade of C-.
Grade Mode: Letter Grading

ECON 775 - Applied Research Skills for Economists
Credits: 4
Capstone course for students enrolled in B.S. in analytical economics. Students conduct economic research by bringing their understanding of economic theory and empirical/analytical skills to investigate contemporary economic problems, issues, and phenomena. Presentations are calculus-based. The topics and course design vary depending on the instructor.
Attributes: Writing Intensive Course
Prerequisite(s): ECON 606 with a minimum grade of C- and ECON 611 with a minimum grade of C- and ECON 726 with a minimum grade of C-.
Grade Mode: Letter Grading

ECON 795 - Internship
Credits: 1-16
On-the-job skill development through fieldwork in an organization (business, industry, health, public service, etc.). Normally, supervision is provided by a qualified individual in the organization, with frequent consultation by a faculty sponsor. Written report required. Internships may be part or full time, with course credits assigned accordingly. May not be used as a major elective.
Grade Mode: Credit/Fail Grading

ECON 799 - Honors Thesis
Credits: 4-8
Supervised research leading to the completion of an honors thesis; required for graduation from the honors program in economics.
Attributes: Honors course; Writing Intensive Course
Grade Mode: Letter Grading

Education (EDC) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

EDC 500 - Foundations of Education
Credits: 4
This course is the introductory course to the education programs. The purpose is to examine the theoretical foundations of education in the United States. Historical, political, and social influences on the development of the education system are examined. Students develop their own educational philosophy and compare it to the philosophies which have shaped American education. A twenty-hour practicum is required.
Attributes: Writing Intensive Course
Equivalent(s): EDU 510G
Grade Mode: Letter Grading

EDC 501 - Foundations of Early Childhood Education
Credits: 4
This course provides an overview of the historical, philosophical, and social foundations of the early childhood profession and how these roots influence current practice. Students examine and write about the issues facing children, families, early childhood programs, and professionals. A variety of educational theories and models are reviewed with regard to how effectively they address the needs of children, parents, and communities. Students establish their own sense of professionalism with connections to the literature, organizations, and resources in the field and by writing their personal philosophies of early childhood education.
Prerequisite(s): PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D-.
Equivalent(s): EDU 550G
Grade Mode: Letter Grading

EDC 502 - Creative Arts in Early Childhood Education
Credits: 4
This course provides a hands-on approach to facilitating the creative development of children. Students explore their own creativity through a variety of media, including art, music, drama, and creative movement. The focus is on the creative process rather than products. Topics include definitions of creativity, how it affects domains of development, and ways it enhances learning. Students apply knowledge of developmentally appropriate practices and integrate them with creative experiences into a well-rounded curriculum that incorporates a variety of learning styles.
Prerequisite(s): PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D-.
Equivalent(s): EDU 553G
Grade Mode: Letter Grading

EDC 503 - Language and Literacy Development
Credits: 4
This course provides in-depth study of the development of children's language and communication skills from birth through age eight. Students identify the various developmental levels exhibited by children, and choose and create diverse materials to enhance language and literacy development. The course focuses on analyzing and creating language-rich programs designed to foster listening, oral and written language, and pre-reading and reading skills at the appropriate developmental level. Students formulate developmentally appropriate questions and responses to enrich the child's experience. The course addresses how everyday experiences can present opportunities for creating meaningful communication between children, their peers, and adults.
Prerequisite(s): PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D- or PSY 525 with a minimum grade of D- or PSY 509G with a minimum grade of D-.
Equivalent(s): EDU 555G
Grade Mode: Letter Grading

EDC 504 - Health, Safety & Nutrition in Early Childhood Settings
Credits: 4
This course provides a comprehensive overview of health, safety and nutrition best practices in early care and education group settings. How best to promote the physical, mental, and emotional health of each child will be explored. State regulations, program procedures, and curriculum integration will be the focus of the course.
Equivalent(s): EDU 556G
Grade Mode: Letter Grading

EDC 505 - Mathematics and Science in Early Childhood Education
Credits: 4
The course focuses on the cognitive development of children birth to age eight with emphasis upon the development and interrelatedness of math and science concepts. Using a hands-on approach, students explore the various materials used in learning centers to stimulate and develop children's logico-mathematical thinking. Students identify the various developmental levels of children's thinking and create developmentally appropriate materials and settings. The course emphasizes the application of developmental principles to investigate and devise experiences which employ mathematical reasoning and scientific processes.
Prerequisite(s): PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D-.
Equivalent(s): EDU 600G
Grade Mode: Letter Grading

EDC 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in Education. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): EDU 544G
Grade Mode: Letter Grading

EDC 601 - Positive Behavior Guidance in Early Childhood Education
Credits: 4
This course provides an overview of children's social and emotional development and an exploration of factors that influence behavior. Topics include the impact of differing development, external factors, relationships, and stress and trauma on child development. Participants will analyze children's behavior in a variety of situations and reflect on how children respond to stimuli. The role of adults in affecting positive development will be explored. Evidence based strategies and techniques for guiding positive behavior will be applied.
Equivalent(s): EDU 560G
Grade Mode: Letter Grading

EDC 602 - Learning and Early Childhood Environments
Credits: 4
This course addresses how to optimize children's learning through play and daily routines. Using theories of child development, participants analyze how the physical arrangement of the classroom and outdoor area can maximize development. Students plan an environment that meets safety and health needs, that allows for child-directed choices and activities, and supports the child's physical, cognitive, language, social, and creative growth. Students apply practices to environments that are both developmentally and culturally inclusive.
Prerequisite(s): PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D-.
Equivalent(s): EDU 551G
Grade Mode: Letter Grading

EDC 606 - Young Children with Exceptionalities in Early Childhood Settings
Credits: 4
This course focuses on promoting the optimal development of young children with special needs in an inclusionary early childhood setting. Building on a foundation of child development and the components of high-quality early childhood programs, students investigate specific physical, emotional, and psychological conditions that delay or modify the course of a child's healthy development. Students observe children with special needs to design curriculum and environmental adaptations. Students develop strategies for collaborating with families and community service providers based on knowledge of legislative mandates regarding special education.
Prerequisite(s): PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D-.
Equivalent(s): EDC 506
Grade Mode: Letter Grading

EDC 607 - Early Childhood Program Administration
Credits: 4
This course provides an overview of the policies, procedures, and leadership practices related to the administration of quality early childhood programs. Topics include program development, budgeting and financial management, organizational structures, and staffing and supervision. The role of directors as leaders is explored. This course is designed for early childhood administrators, as well as for those aspiring to be directors. Prior completion of EDC 713 Family and Community Relations in ECE and EDC 602 Learning and Early Childhood Environments is recommended.
Prerequisite(s): EDC 501 with a minimum grade of D- or EDU 550G with a minimum grade of D-.
Grade Mode: Letter Grading

EDC 644 - Special Topics: Upper Level
Credits: 4
A study of current and variable topics in Education. Course content changes from term to term.
Equivalent(s): EDU 644G
Grade Mode: Letter Grading

EDC 700 - Introduction to Clinical Experience
Credits: 1
This course is required for all students enrolled in teaching licensure programs. Students develop prerequisite skills in lesson planning, assessment creation, data collection, and the formative assessment cycle, as they gain the technical and professional understandings required for successful completion of teacher licensure programs.
Equivalent(s): EDU 622G
Grade Mode: Letter Grading

EDC 701 - Special Education Law
Credits: 4
The current field of special education was established by law and further refined through the courts in litigation. In this writing intensive class, students trace the historical development of federal, state, and local laws and regulations such as the Individuals with Disabilities Education Act (IDEA) and the New Hampshire Standards for the Education of Students with Disabilities. Students will gain an understanding of the relationship between constitutional law, statutory law, regulatory law, and case law as it relates to current special education law. The focus on policies and procedures provides the background that future teachers and paraprofessionals need to fulfill their legal and ethical responsibilities and to understand the ever changing, complex nature of special education law.
Attributes: Writing Intensive Course
Equivalent(s): EDU 621G
Grade Mode: Letter Grading

EDC 702 - Young Children with Exceptionalities, Birth to Age 8
Credits: 4
In this course, students examine typical and non-typical development of children from birth through age 8. This is a time of rapid brain growth and overall development that forms the foundation for all learning. For young children who have exceptionalities in the physical, behavioral, developmental, or learning domains, these years are even more critical. The purpose of this course is to provide current, research-based knowledge and resources for professionals and their families who nurture, support, and provide services to exceptional children.
Grade Mode: Letter Grading

EDC 703 - The Dynamic Role of the Special Educator
Credits: 4
In this clinical course, students will examine the multifaceted role of the special education teacher as evaluator, consultant, case manager, and teacher. Courses taken throughout the teacher certification program support the development of skills for each of these roles. This is an introductory course designed to accomplish the following outcomes: (a) explore the college's digital library; (b) introduce the American Psychological Association annotation and format requirements; (c) provide a beginning teacher with an organizational framework for the varying roles of a special education teacher; (d) provide an in-depth understanding of their case management responsibilities; e) plan for the effective supervision of paraeducators; f) introduce the reflective analysis of student work teaching and assessment cycle; and g) apply the components of systematic direct instruction in lesson plan development.
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 606G
Grade Mode: Letter Grading
Special Fee: Yes

EDC 704 - Assessment of Young Children in Early Childhood and Early Childhood Spec. Education, Birth to Age 8
Credits: 4
In this course, students use procedures involved in the evaluation process for the determination of eligibility for special education. Students develop the skills necessary to administer and interpret assessment tools commonly used by early intervention staff and early childhood special education teachers. Under the supervision of the district mentor, students review early support and services records and/or school records, gather information, observe an evaluation team meeting, consult with district evaluators, and review a variety of assessment tools and evaluation reports for young children through age eight. Students participate in preparing an assessment plan, administering chosen assessment tools, and writing assessment reports. Emphasis is placed on working with team members in the evaluation process.
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 624G
Grade Mode: Letter Grading

EDC 705 - Collaboration, Consultation and Teaming In Early Childhood & Early Childhood Special Education
Credits: 4
In this course, students research and evaluate family, community, and professional partnerships which support the growth and development of children with disabilities. The specific roles and responsibilities of each contributing partner will be explored and analyzed. Students, using knowledge acquired in areas of collaboration, consultation, and teaming, construct service delivery models to support young children with diverse needs and their families. Fifty to sixty supervised clinical hours are required.
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 627G
Grade Mode: Letter Grading

EDC 706 - IFSPs, IEPs, and Transition Planning - Birth to Age 8
Credits: 2
This clinical course focuses on the components and processes involved in the legal aspects and development of Individualized Family Service Plans (IFSPs) and Individualized Education Programs (IEPs). Under the supervision of a district mentor, students review school records; observe IFSP/IEP team meetings; consult with district evaluators, students, and parents; analyze previously written IFSPs/IEPs and progress reports; and develop the skills necessary to prepare IFSPs/IEPs inclusive of transition plans and/or services. The culminating activities of the course include the development of an IFSP an IEP, and a research paper which addresses the legal/ethical considerations and implications in the development of IFSPs and IEPs. Fifty to sixty supervised clinical hours are required.
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 628G
Grade Mode: Letter Grading

EDC 707 - Behavior Interventions for Young Children in Early Childhood/ Early Childhood Special Education
Credits: 4
In this clinical course, students examine basic principles and components of life skills that children need as foundation for the development of positive social skills, e.g., attachment, affiliation, self-regulation, initiative, problem solving, and respect. The student develops and implements a variety of activities and lesson plans to teach young children these critical life skills. Students develop strategies to be used with young children receiving early intervention services and/or to motivate young children in their preschool programs/classrooms by facilitating the development of positive peer relationships, addressing emotional needs, and minimizing disruptions resulting in increased learning. The student documents the use of individual activities and/or classroom strategies in a professional portfolio. Fifty to sixty supervised clinical hours are required.
Attributes: Writing Intensive Course
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 630G
Grade Mode: Letter Grading
Special Fee: Yes

EDC 708 - Science, Technology, Engineering & Mathematics in Early Childhood and Early Childhood Spec Education
Credits: 4
In this clinical course, students focus on STEM content, effective practice, instructional strategies, materials and curriculum integration, based on standards, inquiry, and connections to the real world. STEM concepts of curiosity, creativity, collaboration, and critical thinking are researched and explored. Students will learn about the Scientific Method, as well as the roles of observation, classification, description, experimentation, application, and imagination. Students will learn how to use technology and interactive media in the early childhood classroom to support learning. The role of engineering in the curriculum will be investigated, including design of methods and ideas for product development. Students will understand and apply math process standards of problem-solving, reasoning and proof, communication, connection, and representation. The course emphasizes application of principles in order to investigate and create experiences which employ STEM concepts and teaching strategies.
Attributes: Writing Intensive Course
Prerequisite(s): (MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D-) and (EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-).
Equivalent(s): EDU 625SG
Grade Mode: Letter Grading
Special Fee: Yes

EDC 709 - Teaching Language Arts and Literacy in Early Childhood and Early Childhood Special Education
Credits: 6
This clinical course focuses on the development and instruction of language arts and literacy for children from birth through grade 3, with particular attention to the needs of children in early childhood and early childhood special education settings. Grounded in the research of the National Reading Panel and aligned with developmentally appropriate practices and standards from the National Association for the Education of Young Children (NAEYC), the course emphasizes the foundational components of early literacy, including phonological awareness, print awareness, oral language, vocabulary development, and early writing. Candidates explore the reciprocal relationships between speaking, listening, reading, and writing, and learn to design inclusive, culturally responsive instruction that meets the needs of diverse learners, including children with disabilities and dual language learners. Students assess children's literacy skills using both formal and informal tools and apply differentiated strategies to support language and literacy growth across home, classroom, and community contexts. Although this course focuses on birth through age 3, strategies and methods for teaching reading through grade 8 are covered in order to help prepare teachers for the Pearson Foundations of Reading Test. Drawing on the principles of the science of reading and structured literacy, the course prepares candidates to deliver evidence-based instruction that supports the development of proficient readers. Students learn to implement systematic, explicit instruction in phonics and other critical components of reading, consistent with current research and best practices for early literacy intervention. Fifty to eighty supervised clinical hours are required, with opportunities to observe and engage with children in early childhood and special education settings, collaborate with families, and evaluate the effectiveness of instruction. #As part of the clinical experience, students will complete a Small Group Decoding Intervention Project, providing hands-on practice in identifying decoding needs, designing targeted phonics instruction, and monitoring student progress. This semester-long project involves working with a small group of K–8 students over 5–6 weeks, conducting assessments, delivering instruction, and reflecting on student growth and instructional effectiveness. It serves as a key opportunity to apply course concepts to authentic classroom practice and is aligned with all course learning outcomes.
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 601AG
Mutual Exclusion: No credit for students who have taken EDUC 706.
Grade Mode: Letter Grading
Special Fee: Yes

EDC 710 - Curriculum, Assessment and Instruction in Early Childhood/ Early Childhood SPED - Birth to Age 8
Credits: 4
In this clinical course, students examine, develop, and evaluate developmentally appropriate curriculum and instruction in early childhood and special education settings, for young children age five (kindergarten) through age eight (grade 3). Students use district and state curriculum and integrate subjects with one another. Students develop skills to create and advocate for healthy, supportive, respectful, and challenging learning environments for all children, ages five through eight.
Attributes: Writing Intensive Course
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 626G
Grade Mode: Letter Grading
Special Fee: Yes

EDC 711 - Managing Student Behavior (non-clinical)
Credits: 4
This course is designed for non-teacher preparatory candidates to provide an overview of classroom behavior management. Students observe effective teachers using instructional management strategies. They administer and interpret questionnaires to analyze the classroom environment and identify student needs. They identify strategies to help students meet these needs, to increase motivation, to develop positive peer relationships, and to minimize disruption.
Prerequisite(s): PSY 525 with a minimum grade of D- or PSY 509G with a minimum grade of D- or PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D- or PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D-.
Equivalent(s): EDU 623G
Grade Mode: Letter Grading

EDC 712 - Observation and Assessment in Early Childhood Education
Credits: 4
This course is designed to provide early childhood educators with the ability to use a variety of assessment methods to determine the developmental levels and needs of young children. Students are introduced to the meaning and uses of authentic assessment, as well as various tools and assessment strategies. The course addresses the interpretation of observational and assessment data to monitor children's progress, guide instructional practice, and identify and refer at-risk children. Prior completion of EDC 602 Learning and Early Childhood Environments is recommended.
Attributes: Writing Intensive Course
Prerequisite(s): PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D-.
Equivalent(s): EDU 601G
Grade Mode: Letter Grading

EDC 713 - Family and Community Relations in Early Childhood Education
Credits: 4
This course examines various ways of enhancing the young child's development through promoting positive interrelationships among child care providers, parents, and others in the community. Using an ecological systems framework, the course builds knowledge of the roles of diverse family structures, cultural identities, stressors and supports, economic circumstances, and community characteristics and resources in facilitating child development. Students develop skills needed for communicating effectively with families, facilitating parent education, and promoting family involvement with child care settings as well as utilization of community resources. NOTE: Prior completion of SOSC 675 Dynamics of Family Relationships is recommended.
Attributes: Writing Intensive Course
Equivalent(s): EDU 603G
Grade Mode: Letter Grading

EDC 715W - Enhancing Supervision through Mentoring
Credits: 4
In this course, early childhood educators who are primary supervisors of teachers or assistant teachers explore the various dimensions of their role. Based on concepts of adult development and the stages of teacher development, participants learn to establish mentoring relationships and balance supervisory responsibilities as they gain skills to guide new employees, set goals, provide feedback on performance, resolve conflicts, and create positive working environments.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

EDC 716 - Students with Disabilities
Credits: 4
This course provides an overview of the thirteen Individuals with Disabilities Education Act (IDEA) educational disabilities and the opportunity to explore the implications of disability on learning. Students will develop knowledge of specific disabilities including: definition, diagnosis, etiology, prevalence, characteristics, adaptive behavior, and systems of support and resources. Students will explore how disability impacts learning and access to the general education curriculum. Students will research and identify teaching strategies, Universal Design for Learning (UDL) strategies, interventions, and educational and assistive technologies to enhance learning and provide equity in the classroom for students with disabilities.
Equivalent(s): EDU 617G
Mutual Exclusion: No credit for students who have taken EDUC 650, EDUC 750.
Grade Mode: Letter Grading

EDC 717 - Positive Behavior Guidance and Student Engagement
Credits: 4
In this clinical course, students explore the theory of social-emotional development, preventative intervention strategies, and the characteristics of safe and supportive learning communities. Students examine specific strategies for motivating students and promoting positive relationships between colleagues, students, and parents in an effort to enhance learning. Students conduct a functional behavior assessment as they develop a comprehensive perspective on classroom culture through the development of proactive management skills and intervention strategies.
Attributes: Writing Intensive Course
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 619G
Grade Mode: Letter Grading
Special Fee: Yes

EDC 718 - Transition Planning & Developing IEPs
Credits: 2
This clinical course focuses on the components and processes involved in developing Individualized Education Programs (IEPs). Under the supervision of a supervising practitioner, students review school records, observe IEP team meetings, consult with district evaluators, students, and parents, analyze previously written IEPs and progress reports, and develop the skills necessary to prepare IEPs that include transition plans. During the culminating activity of the course, students develop an IEP and transition plan as a vehicle for exploring the legal and ethical considerations and implications in the development, implementation, and evaluation of IEPs.
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 609G
Grade Mode: Letter Grading

EDC 719 - Using Technology to Teach Social Studies
Credits: 4
Technology is a necessary tool in teaching today's youth. In this clinical course, students focus on developing three broad skills: (1) how to design and teach an integrated social studies unit that challenges and assists K-8 students to think deeply, (2) how to incorporate into the plan a wide range of mostly constructivist instructional strategies, and (3) how to integrate a rich array of technology tools and digital educational content in a way that amplifies student learning.
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 612G
Grade Mode: Letter Grading
Special Fee: Yes

EDC 720 - Instructional Methods, Strategies, and Technologies to Meet the Needs of All Students
Credits: 4
Through the development of lesson plans in this clinical course, students demonstrate knowledge and expertise of a variety of instructional methods and research-based strategies to improve learning for diverse student populations facing complex individual learning challenges. Students will research instructional strategies and metacognition to determine its effectiveness in increasing independence, enhancing learning, and developing thinking skills in mathematics. Through their understanding of the principles of instruction, assessment, remediation, and technology integration, students develop a comprehensive math unit.
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 607G
Grade Mode: Letter Grading
Special Fee: Yes

EDC 721 - Assessment of Students with Disabilities
Credits: 4
This course focuses on the tools and procedures involved in the evaluation and determination of education disabilities. Under the supervision of the district mentor, students review school records, observe an evaluation team meeting, consult with district evaluators, review various assessment tools and evaluation reports, and develop the skills necessary to administer and interpret some of the assessments commonly used by special education teachers. The culminating activity of the course is the development of a formal assessment report.
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 611G
Grade Mode: Letter Grading

EDC 722 - Strategies for Teaching Science
Credits: 4
This clinical course focuses on learning theories and their application to science instruction. Students examine a variety of instructional strategies through readings, observation and participation in their clinical placements, and determine the appropriateness of each in the learning process. Topics include constructivist learning, differentiated learning, and an in-depth look at how the state and national standards guide science instruction. Additional topics include integrated STEM curricula, the appropriate use of technology, and effective formative, summative, and alternative assessment strategies. Students plan, teach and evaluate an integrated thematic unit with lessons that align with Next Generation Science Standards.
Attributes: Writing Intensive Course
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 613G
Grade Mode: Letter Grading
Special Fee: Yes

EDC 723 - Teaching Language Arts and Literacy
Credits: 6
This clinical course explores the development and instruction of language arts and literacy from kindergarten through grade 8. Grounded in the research of the National Reading Panel and the standards of the National Council of Teachers of English, the course addresses phonemic awareness, phonics, fluency, vocabulary, and comprehension alongside writing, speaking, and listening. Students engage in classroom observations, design and implement instructional strategies for diverse learners, and assess student progress in both reading and writing. Clinical work includes family and caregiver engagement, as well as curriculum evaluation. Drawing on the principles of the science of reading and structured literacy, the course prepares candidates to deliver evidence-based instruction that supports the development of proficient readers. Students learn to implement systematic, explicit instruction in phonics and other critical components of reading, consistent with current research and best practices for early literacy intervention. Fifty to eighty supervised clinical hours are required, with opportunities to observe and engage with children in early childhood and special education settings, collaborate with families, and evaluate the effectiveness of instruction. As part of the clinical experience, students will complete a Small Group Decoding Intervention Project, providing hands-on practice in identifying decoding needs, designing targeted phonics instruction, and monitoring student progress. This semester-long project involves working with a small group of K–8 students over 5–6 weeks, conducting assessments, delivering instruction, and reflecting on student growth and instructional effectiveness. It serves as a key opportunity to apply course concepts to authentic classroom practice and is aligned with all course learning outcomes.
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 610G
Grade Mode: Letter Grading
Special Fee: Yes

EDC 724 - Elementary School Mathematics Methods
Credits: 4
This clinical course focuses on learning theories and their application to elementary school mathematics instruction. Students research a variety of instructional strategies through readings, observation, and participation in a clinical placement and determine the appropriateness of each in the learning process. Topics include constructivist learning, differentiated learning, and an in-depth look at how the Common Core State Standards in Mathematics guide mathematics instruction. Additional topics include integrated curricula, the appropriate use of technology, and effective formative, summative, and alternative assessment strategies. Students plan two five-lesson mathematics units for two different grade levels, teaching and reflecting on lessons taught in one of the units.
Attributes: Writing Intensive Course
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 616G
Mutual Exclusion: No credit for students who have taken MATH 703.
Grade Mode: Letter Grading
Special Fee: Yes

EDC 731 - Aspects of Mathematics Learning
Credits: 4
The clinical course is designed to provide prospective secondary school and middle school teachers with the skills to develop an integrated approach to teaching and learning mathematics. It will cover cultural and psychological aspects of learning mathematics, models of instruction and planning, teaching and learning styles, assessment strategies, models and organization, curriculum materials selection, classroom management, and the role of technology and media within these.
Attributes: Writing Intensive Course
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-.
Equivalent(s): EDU 652G
Mutual Exclusion: No credit for students who have taken MATH 700.
Grade Mode: Letter Grading
Special Fee: Yes

EDC 732 - Reading and Writing in the Mathematics Content Area
Credits: 4
This clinical course is designed to provide prospective secondary and middle school teachers with the knowledge, skills, and resources necessary to incorporate literacy skills into their mathematics content area plans. Emphasis will be on integrating the teaching of reading, writing, and oral literacy skills from various fields; students will explore and practice the methods and strategies, including testing and measurement assessments necessary to meet the diverse literacy needs of today's students allowing them to become independent students. Teaching and discussing theoretical and practical application of current theories and methods involved in teaching literacy to diverse secondary and middle student population within the contemporary pluralistic classroom, including differentiated learning styles through socioeconomic status, gender, and heritage, will be emphasized.
Attributes: Writing Intensive Course
Prerequisite(s): EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D- or EDC 731 with a minimum grade of D- or EDU 652G with a minimum grade of D-.
Equivalent(s): EDU 653G
Grade Mode: Letter Grading
Special Fee: Yes

EDC 733 - Middle Level Mathematics Methods
Credits: 4
This clinical course focuses on mathematics learning theories and their application to middle school mathematics instruction. Students examine a variety of instructional strategies through readings, observation and supervised teaching. Topics include constructivist learning, differentiated learning, and an in-depth look at how the state and national standards guide mathematics instruction. Additional topics include integrated curricula, the appropriate use of technology, and effective formative, summative, and alternative assessment strategies. Students plan two, five-lesson mathematics units for two different grade levels, teaching and reflecting on lessons taught in one of the units. Depending on the certification program, a range of fifty to ninety supervised clinical hours are required.
Attributes: Writing Intensive Course
Prerequisite(s): (EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-) and (EDC 732 with a minimum grade of D- or EDU 653G with a minimum grade of D-).
Equivalent(s): EDU 614G
Mutual Exclusion: No credit for students who have taken MATH 703, MATH 709.
Grade Mode: Letter Grading
Special Fee: Yes

EDC 734 - Upper Level Mathematics Methods
Credits: 4
This clinical course focuses on mathematics learning theories and their application to secondary mathematics instruction. Students examine a variety of instructional strategies through readings, observation, and supervised teaching. Topics include constructivist learning, differentiated learning, and an in-depth look at how the state and national standards guide mathematics instruction. Additional topics include integrated curricula, the appropriate use of technology, and effective formative, summative, and alternative assessment strategies. Students plan two, 5-lesson mathematics units for two different grade levels, teaching and reflecting on lessons taught in one of the units. Depending on the certification program, a range of fifty to ninety supervised clinical hours are required.
Attributes: Writing Intensive Course
Prerequisite(s): (EDC 700 with a minimum grade of D- or EDU 622G with a minimum grade of D-) and (EDC 732 with a minimum grade of D- or EDU 653G with a minimum grade of D-).
Equivalent(s): EDU 615G
Mutual Exclusion: No credit for students who have taken MATH 709.
Grade Mode: Letter Grading
Special Fee: Yes

EDC 790 - Integrative: English Language Arts
Credits: 4
This capstone course in English Language Arts builds on all previous work in both education and English. Students explore current research in the field of English Language Arts education and synthesize their knowledge to build effective instructional practices that support children's learning. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): EDU 660G
Grade Mode: Letter Grading

EDC 791 - Integrative: Social Studies
Credits: 4
This capstone course in Social Studies builds on all previous work in both education and Social Studies. Students explore current research in the field of Social Studies and synthesize their knowledge to build effective instructional practices that support children's learning. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): EDU 661G
Grade Mode: Letter Grading

EDC 792 - Integrative: Mathematics Studies
Credits: 4
This capstone course in Math Studies builds on all previous work in both education and Math Studies. Students explore current research in the field of Math and synthesize their knowledge to build effective instructional practices that support children's learning. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): EDU 665G
Grade Mode: Letter Grading

EDC 797 - Practicum: Professionalism in Early Childhood Education
Credits: 4
This clinical course is designed to provide an opportunity for students to apply early childhood educational and developmental theory to practice in a licensed early childhood setting. Students participate in an approved site where they plan and implement curriculum under the supervision of a credentialed early childhood professional. This capstone experience allows the student to integrate course work in early childhood education, curriculum, assessment, and child development. In addition, students reflect upon and analyze field experiences. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): EDU 650G
Grade Mode: Letter Grading
Special Fee: Yes

EDC 798 - Culminating Teaching Experience and Seminar
Credits: 4
This course is the culminating experience in the plan of study toward NH teacher certification. This course gives teacher candidates an opportunity to be mentored in their field of certification by experienced teachers holding graduate degrees and to practice the variety of methods and strategies studied in the teacher preparation program. Teacher candidates enrolled in this course may be at different stages of acquiring the three hundred sixty to four hundred forty hours of supervised teaching experience. Additionally, teacher candidates will use the Teacher Candidate Assessment of Performance process to develop a final culminating document that demonstrates their proficiency in the areas of contextualization, planning and preparation, instruction, academic language, assessment, and reflection.
Attributes: Writing Intensive Course
Equivalent(s): EDU 651G
Grade Mode: Letter Grading
Special Fee: Yes

Education (EDUC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

EDUC 400 - Careers in Education: Exploring Professional Contexts
Credits: 1
Designed for students interested in learning about careers in education, this survey course explores professional opportunities in both formal and informal education settings within P-12 teaching and beyond (i.e., research, museum director, counseling, social work, educational software developer, etc.). Faculty from multiple disciplines and local professionals will present seminars and lead discussions about their role in addressing contemporary issues in education. Students will consider pathways that can be taken to pursue professional goals.
Grade Mode: Credit/Fail Grading

EDUC 402 - Introduction to Educational Studies: Social Change and Education in Local and Global Contexts
Credits: 4
This course introduces students to Educational Studies: the ways that social, cultural, and political factors influence education outside of conventional school settings. We examine the relationship between education and social change in local and global contexts. Guiding questions include: How does schooling produce certain kinds of citizens? How do grassroots movements use education to resist colonial/colonizing agendas? What role does education play in promoting democracy, and social and economic equality?.
Grade Mode: Letter Grading

EDUC 500 - Exploring Teaching
Credits: 4
For students considering a teaching career. In-school experiences to develop introductory skills in teaching. On-site seminars for analysis and evaluation. Assessment and advising related to teaching as a career. Prerequisite for further work toward teacher licensure. Minimum of 7 hours a week, plus travel time, required.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

EDUC 506 - Mentoring Readers and Writers in the Elementary Grades
Credits: 4
This course supports and extends the experiences of students who are simultaneously volunteering with the Seacoast Reads program. Students explore mentoring relationships, elementary students' engagement and motivation, effective practices for supporting literacy development, lesson planning, understanding student growth, and volunteers' own development as educators.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

EDUC 520 - Education, Poverty, and Development
Credits: 4
An examination of the human and institutional relationships among education, poverty, and social development. This course will emphasize the ways in which access to universal, effective education is correlated with the incidence of childhood poverty and its reduction in the US and selected countries in the developing world. Interactive, discussion-based classes. Prior coursework in social or political sciences, economics, international affairs, health sciences, or related fields suggested. A minimum of 15 hours of fieldwork beyond classroom time is required. Students can fulfill this requirement through a variety of experiences on and off campus.
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

EDUC 525 - The Idea of Race in Teaching and Learning
Credits: 4
This course examines the idea of race from the perspective of science, history, and lived experience to help the student properly evaluate inequalities of treatment (on the basis of race or any other marker) in various sectors of life in the United States. The course aims to help the student a) perceive what is taught about race and what is communicated in our schools and colleges about the meaning of racial ascription and b) to figure out how the power of educational institutions can best be used to promote equality and fairness in society.
Grade Mode: Letter Grading

EDUC 550 - Language and Linguistic Diversity in Schools
Credits: 4
The course offers a broad examination of language and linguistic diversity and identities, drawing from education, sociolinguistics, anthropology, child development, and related fields. Content includes a critical examination of the evolution of the laws and policies affecting linguistic minorities in the U.S. and how they inform the educational rights of emerging and developing bilingual learners. A minimum of 20hrs of fieldwork beyond classroom time is required. Students have the opportunity to identify age group preference for field placement.
Grade Mode: Letter Grading

EDUC 556 - Peer to Peer Mentoring for Students with Disabilities
Credits: 2
This in person course is open to all undergraduates pursuing any major who have an interest in learning more and experiencing the importance of mentoring and diversity expansion at UNH. The primary goal is to introduce UNH undergraduates with and without intellectual disabilities to a mentoring experience. UNH students will develop a beginning understanding of the importance of expanding the diversity of the UNH campus to include students with disabilities in authentic campus life experiences including taking courses, extra-curricular activities, residential life, and on campus employment. Each mentor/mentee relationship will be individualized based on the needs of the students enrolled in the course and mentoring relationships will be matched based on the completion of individualized student directed personalized future planning.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

EDUC 605 - Educational Perspectives in Critical Times
Credits: 4
In this course students inquire, reflect on and teach ethical dilemmas in the practice of education. Students will establish a foundation of knowledge on which to build philosophies of education in preparation for a career in which they face policies influenced by political agendas, fads, and economic interests. Through readings, discussions and field experiences, students will become more practiced and comfortable in having difficult discussions related to pressing issues of education and equity.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading
Special Fee: Yes

EDUC 610 - Clinical Experience in Educational Studies
Credits: 1-4
Work with an agency, institution, or organization to gain technical and/or professional competence not otherwise available. Student plans experience with departmental advisor. Credit approval subject to recommendation of faculty members and performance of student.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

EDUC 650 - Introduction to Disability in Inclusive Schools and Communities
Credits: 4
In this foundational course, students will be introduced to evidence-based practices in equity-based inclusive education, leading to improved academic, social, communication, and behavioral outcomes for all students. Through a variety of films, readings, podcasts, interviews, and fieldwork assignments, students will explore education through the lens of learners with disabilities, families, and educators' perspectives. Students in this course represent a broad array of disciplines, including special education, social work, communication disorders, family studies, occupational therapy, early childhood, and more.
Mutual Exclusion: No credit for students who have taken EDC 716.
Grade Mode: Letter Grading

EDUC 656 - Advocating for Diverse and Inclusive Family-School-Community Partnerships
Credits: 4
The course is to examine the socio-cultural circumstances surrounding racially, culturally and linguistically diverse (RCLD) families raising children with disabilities, address the implications of the Individuals with Disabilities Education Act (IDEA) and Every Student Succeeds Act (ESSA) for families and professionals, discuss issues regarding families' experience during the special education process, assess family strengths and coping styles, and develop knowledge and skills to advocate for diverse and inclusive family-school-community partnerships.
Grade Mode: Letter Grading

EDUC 694 - Courses in Supervised Teaching
Credits: 8
Supervised Teaching of Music. Supervised Teaching of Adult and Occupational Education. Supervised Teaching of Mathematics.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

EDUC 694A - Supervised Teaching/Music
Credits: 8
Supervised Teaching of Music.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

EDUC 694C - Supervised Teaching/Mathematics
Credits: 8
Supervised Teaching of Mathematics.
Grade Mode: Credit/Fail Grading

EDUC 694D - Supervised Teaching/Kinesiology
Credits: 4
Supervised Teaching of Kinesiology.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

EDUC 701 - Human Development & Learning: Cultural Perspectives
Credits: 4
Learning in formal and informal contexts and cultural aspects of learning and development with an emphasis on childhood and adolescence. Theories of learning including behaviorism, constructivism, sociocultural, and design perspectives. Topics include research and varied cultural perspectives on intelligence, motivation, identity and the self, concept learning and knowledge, noncognitive aspects of learning, social and emotional learning, deficit thinking and social justice perspectives, design-based perspectives on educational innovation, and assessment. Junior and Senior status.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading
Special Fee: Yes

EDUC 703C - Classroom Management: Creating Positive Learning Environments
Credits: 4
This course is designed to help prospective and current teachers create and maintain caring, respectful classroom communities in which learners feel safe, valued, cared for, valued, and empowered. The course includes a strong emphasis on developing knowledge about the culture and backgrounds of children and families in order to establish positive interactions within the classroom community. The course addresses the challenges and opportunities in creating community in the increasingly diverse student populations in US schools. We will consider what it means to be culturally responsive in order to establish a classroom in which all students can succeed academically and socially.
Grade Mode: Letter Grading

EDUC 703D - Social Studies Methods for Middle and High School Teachers
Credits: 4
The social studies theory and methods course begins with an overview of the varied and, at times, competing goals and visions of the profession. Students examine these goals and their underlying rationales, and then develop their own philosophy of social studies teaching and learning. Students also examine state and national scope and sequence frameworks for the social studies, as well as the language arts Common Core standards. A variety of classroom strategies and methods are explored during the remainder of the course, including unit design, leading class discussions, how to approach controversial issues, teaching concepts and generalizations, increasing student engagement and empathy with the past, incorporating technology and the arts, management and discipline, and formats for assessment and grading.
Grade Mode: Letter Grading
Special Fee: Yes

EDUC 703F - Teaching Elementary School Science
Credits: 4
This course is designed to increase pre-service teachers' pedagogical content knowledge and enthusiasm with respect to teaching science at the elementary level. Throughout this course, students will familiarize themselves with reform-based approaches to elementary science instruction through inquiry, readings, and class discussions. Science will be explored not only as an important element of elementary education, but also as a means by which to support a diverse class of elementary students in literacy and mathematics learning.
Grade Mode: Letter Grading
Special Fee: Yes

EDUC 703M - Teaching Elementary Social Studies
Credits: 4
Social Studies Methods explores practical teaching models, techniques of implementation, and relationships to curricula in elementary classroom instruction. The New Hampshire Social Studies Frameworks and Common Core Curriculum Standards for instruction are identified and implemented in creating lesson plans for a mini unit.
Grade Mode: Letter Grading
Special Fee: Yes

EDUC 706 - Teaching & Learning Literacy in the Elementary Classroom
Credits: 4
Methods in reading and writing instruction, including current theories, practices and materials for teaching, learning and assessment. Course includes a weekly practicum in an elementary classroom and satisfies reading/language arts requirement for prospective elementary teachers in the elementary or P-3 certification programs.
Mutual Exclusion: No credit for students who have taken EDC 709.
Grade Mode: Letter Grading
Special Fee: Yes

EDUC 707 - Teaching Reading through the Content Areas
Credits: 2
Approaches and methods for teaching reading through content materials; coursework includes practical applications through development of instructional strategies and materials. Required for candidates seeking certification in art, biology, chemistry, earth science, general science, physical science, physics, or social science.
Grade Mode: Letter Grading

EDUC 710 - Navigating Difficult Dialogue
Credits: 4
This course is designed to support navigating the inevitable 'difficult dialogues' we encounter in schools (and life). This course emphasizes practicing basic counseling skills and deeper listening skills to facilitate effective dialogue and outcomes in a variety of settings. Teachers and administration in schools, managers in the workplace, business leaders in organizations, leaders in communities, and other educators in various fields will find this course useful in their professional work with individuals and groups.
Grade Mode: Letter Grading

EDUC 712 - Teaching Multilingual Learners
Credits: 4
This course is for people interested in teaching in schools and/or community agencies serving multilingual populations. Topics include: theories of first and second language acquisition, translanguaging, language policies and laws, strategies for teaching academic content to emerging bilinguals in mainstream classroom, creating classroom/school cultures that invite all students into learning, and the role of advocacy and professional collaboration in linguistically diverse public schools. In addition to designing and exploring a variety of teaching activities and techniques, students conduct a rich collection of field assignments including interviewing bi-/multilingual adults; visiting community agencies; and collaboratively designing community engagement activities.
Grade Mode: Letter Grading

EDUC 718 - Critical Social Justice in and Beyond Education
Credits: 4
Students will become familiar with key concepts and principles of critical theory, critical pedagogy, and social justice education so that they may use this body of work to inform their teaching, leadership, and scholarship. We will examine the role of a) schools in providing equity of educational access and outcomes, b) teacher agency to change unjust conditions, and c) micro experiences within schools and the macro layer of context (i.e., history, politics, economics, culture).
Grade Mode: Letter Grading

EDUC 720 - Educational Technology
Credits: 4
Educators with any experience level will develop the skills and mindset to find and use technology tools that can enhance student learning. Assignments and online discussions focus on foundational educational technology topics, including ethical and social justice considerations, best practices, and national technology standards. Assignments are completed using each week's tech tool category, such as presentations, image/video editing, and website creation. Participants will curate educational technology tools that fit their preferences and needs. This class will include the focus on facilitating remote learning.
Grade Mode: Letter Grading

EDUC 733 - Teaching Writing in the Elementary Grades
Credits: 4
An exploration of writing and writing instruction across a range of expressive forms, including digital technologies, social media, and video. Special emphasis on engagement with and preparation to teach multimodal literacies in elementary classrooms. Includes a focus on language diversity, the relationship between reading, writing, and literacy development, student-centered assessments, and integrating the arts into the reading and writing workshop.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

EDUC 734 - Critical Perspectives on Children's Literature
Credits: 4
Interpretive and critical study of literature and nonfiction texts written for elementary and middle school readers. Applications of children's literature in educational settings.
Grade Mode: Letter Grading

EDUC 739 - Assessment and Individualized Educational Planning in Special and Inclusive Education
Credits: 4
This course is intended to develop beginning inclusive and special educators' abilities in (a) assessing learners and learning environments, (b) designing, implementing, and evaluating the effectiveness of instruction through the use of individualized educational plans, and (c) implementing high-leverage practices in the areas of collaboration, assessment, and social/emotional/behavioral supports. Provides a focus on federal and state legal and procedural mandates.
Grade Mode: Letter Grading

EDUC 740 - Methods for Supporting Students in Special Education Using Intensive Interventions
Credits: 4
This course is designed to prepare educators to develop, implement, and assess the efficacy of evidence-based interventions for children and youth with intensive learning and behavioral needs. Topics addressed include the analysis of characteristics of learners and learning environments, and the subsequent design of individualized educational interventions in the areas of receptive and expressive language and literacy, mathematics, content-area academics and functional social/behavioral skills.
Grade Mode: Letter Grading

EDUC 751A - Inclusive Elementary Education: Literacies and Learning for Diverse Learners
Credits: 4
This course examines the role and responsibility of the elementary educator as an advocate for, and educator of, students with diverse learning needs. Methods and structure to enable educators to understand, engage, and respond to the challenges presented within an academically diverse classroom are addressed. Special focus is given to research and applications for facilitating emergent literacies and social, emotional and behavioral development.
Grade Mode: Letter Grading
Special Fee: Yes

EDUC 751B - Methods of Inclusive Secondary Education: Literacies, Learning, and Transitions
Credits: 4
This course examines the role and responsibility of the secondary educator as an advocate for, and educator of students with diverse learning needs. Methods and structures to enable educators to understand, engage, and respond to the challenges presented within an academically diverse classroom are addressed. Special focus is given to research and applications for developing literacy, knowledge and competence within the content areas, and for facilitating post secondary transitions.
Grade Mode: Letter Grading
Special Fee: Yes

EDUC 760 - Introduction to Young Children with Special Needs
Credits: 4
Needs of children (birth to eight years) with developmental delays or who are at risk for disabilities. Strengths and special needs of such children; causes, identification, and treatment; current legislation; parent and family concerns; program models.
Grade Mode: Letter Grading

EDUC 761 - Designing Curriculum for Inclusive, Equitable Settings for Young Children (birth-8)
Credits: 4
This course focuses on designing curriculum for inclusive and equitable settings for young children, birth through age 8. Classroom applications for constructivist theory in the areas of curriculum planning and implementation; issues of equity and diversity in curriculum and assessment; overview of research and theory related to teaching and learning of specific content areas, with emphasis on integrated approach to early childhood curriculum. Stresses the reciprocal nature of student-teacher relationship in the inclusive and equitable settings.
Grade Mode: Letter Grading

EDUC 784 - Educators as Engaged Researchers and Reflective Professionals
Credits: 4
Educators as Engaged Researchers and Reflective Professionals is the culminating course for students completing their B.A in Education. The course is an integrative experience designed to offer students the space and opportunity to reflect on their time as undergraduate Education students and apply their knowledge in meaningful ways. This course will guide students in understanding their development within the major, encouraging and challenging them during this transitional, final semester to consider how they will draw on their knowledge and experiences in purposeful ways to positively impact their future academic, professional, and personal goals and endeavors. This work will manifest in different ways, and students will have the space to personalize their capstone experience; however, all students will be expected to complete two primary outcomes: portfolio and research experience.
Grade Mode: Letter Grading

EDUC 795 - Independent Study
Credits: 2 or 4
Juniors and seniors only, with approval by appropriate faculty member.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

EDUC 798 - Internship and Seminar in Inclusive Teaching
Credits: 4
This course is the fall teaching internship for students enrolled in the BA in Education program. This internship (part of a two-course sequence) is the culminating clinical experience required for licensure. Students will complete internship hours with a Clinical Educator, supervised by a UNH instructor. Students will also attend a weekly seminar where course assignments will be completed.
Prerequisite(s): EDUC 706 with a minimum grade of D- or EDUC 806 with a minimum grade of B-.
Grade Mode: Credit/Fail Grading

EDUC 799 - Internship and Seminar in Inclusive Teaching
Credits: 8
This course is the spring teaching internship for students enrolled in the BA in Education program. This internship (part of a two-course sequence) is the culminating clinical experience required for licensure. Students will complete internship hours with a Clinical Educator, supervised by a UNH instructor. Students will also attend a weekly seminar where course assignments will be completed.
Prerequisite(s): EDUC 706 with a minimum grade of D- or EDUC 806 with a minimum grade of B-.
Grade Mode: Credit/Fail Grading

Electrical & Computer Engineering (ECE)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ECE 401 - Perspectives in Electrical and Computer Engineering
Credits: 4
An introductory course for electrical and computer engineering majors that introduces incoming students to the fundamental concepts of analysis and design. Concepts are presented through an examination of real-world problems. Students are introduced to electrical and computer engineering problem solving and design through active learning techniques in lecture and in a laboratory setting. Provides a context for the electrical engineering and computer engineering curriculum and introduces the profession and activities of electrical and computer engineering. Lab.
Attributes: Inquiry (Discovery)
Grade Mode: Letter Grading

ECE 537 - Introduction to Electrical Engineering
Credits: 4
Fundamentals of electrical engineering. Topics are circuit elements; signal waveforms; circuit laws and theorems; transfer functions; free, forced, and steady state responses; power calculations; amplifiers; and magnetic circuits. Lab.
Prerequisite(s): (PHYS 408 with a minimum grade of D- or PHYS 408S with a minimum grade of D- or PHYS 408H with a minimum grade of D-) and MATH 527 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 541 - Electric Circuits
Credits: 4
Linear passive circuits beginning with resistive circuits, power and energy relations, mesh and node analysis. Transient and steady-state behavior of simple circuits containing energy storage elements (capacitors, inductors). Introduction to linear active circuits using dependent source models and ideal op amps. Introduction to transfer function and frequency response concepts. Lab.
Prerequisite(s): MATH 426 (may be taken concurrently) with a minimum grade of D- and (PHYS 408 (may be taken concurrently) with a minimum grade of D- or PHYS 408S (may be taken concurrently) with a minimum grade of D- or PHYS 408H (may be taken concurrently) with a minimum grade of D-).
Grade Mode: Letter Grading

ECE 543 - Introduction to Digital Systems
Credits: 4
Fundamental analysis and design principles. Number systems, codes, Boolean algebra, and combinational and sequential digital circuits. Lab: student-built systems using modern integrated circuit technology and an introductory design session on a CAD workstation. Lab.
Grade Mode: Letter Grading

ECE 548 - Electronic Design I
Credits: 4
Introduction to electronic design for analog signal processing. Basic Concepts of Semiconductor Materials (electrons and holes, n-type and p-type semiconductors), Diodes (Modeling, Biasing, Zener Diodes, and Rectifier Circuits), FETs (Device Structure, Modes of Operation, and I-V Characteristics), BJTs (Device Structure, Modes of Operation, and I-V Characteristics), Transistor Amplifiers (Biasing a Transistor, Small-Signal Modeling, and Configurations), Operational Amplifier circuits for amplification and filtering. Lab.
Prerequisite(s): ECE 541 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 562 - Computer Organization
Credits: 4
Basic computer structure, including arithmetic, memory, control, and input/output units; the tradeoffs between hardware, instruction sets, speed, and cost. Laboratory experiments will use hardware and software to understand the concepts of instruction set architecture, machine language programming, control and data path design, and I/O interfacing.
Prerequisite(s): ECE 543 with a minimum grade of D- and CS 410C with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 583 - Designing with Programmable Logic
Credits: 6
This course covers topics related to field programmable logic devices. Students will be introduced to Hardware Description Language (HDL) design entry languages and simulation procedures, along with common logic synthesis tools. In laboratory exercises, each student will prototype a digital system starting with HDL entry, functional and timing simulations, logic synthesis, device programming, logic probing, and system verification. Labs will develop report writing skills. This course is required for CE majors and optional for EE majors.
Prerequisite(s): ECE 543 with a minimum grade of D- and ECE 562 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 602 - Engineering Analysis
Credits: 3
Analyze and solve engineering problems using linear algebra and integral and differential calculus of functions of several variables. Boundary-value problems in mechanics, fluid dynamics, and electrostatics. Examination of electrostatics, magnetostatics, and fluid and wave mechanics using vector differential and integral calculus. Introduction of approximation and error analysis methods as fundamental engineering tools.
Prerequisite(s): MATH 527 with a minimum grade of D- and MATH 645 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 603 - Electromagnetic Fields and Waves I
Credits: 3
Maxwell's equations in integral and differential form with applications to static and dynamic fields. Uniform plane waves in free space and material media. Boundary conditions; simple transmission line theory; parallel plate and rectangular waveguides; simple radiating systems.
Prerequisite(s): (PHYS 408 with a minimum grade of D- or PHYS 408S with a minimum grade of D- or PHYS 408H with a minimum grade of D-) and ECE 602 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 633 - Signals and Systems I
Credits: 3
Mathematical characterization of continuous-time systems using time- and frequency-domain concepts. Properties of linear systems described by ordinary differential equations. Fourier analysis of signals and system frequency response functions. Applications to communication and control systems. Introduction to system simulation using computer methods.
Prerequisite(s): MATH 527 with a minimum grade of D- and MATH 645 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): ECE 633H
Grade Mode: Letter Grading

ECE 633H - Honors/Signals and Systems I
Credits: 4
Mathematical characterization of continuous-time systems using time- and frequency-domain concepts. Properties of linear systems described by ordinary differential equations. Fourier analysis of signals and system frequency response functions. Applications to communication and control systems. Introduction to system simulation using computer methods. Honors students will attend an additional one-hour meeting each week.
Attributes: Honors course
Prerequisite(s): MATH 527 with a minimum grade of D- and MATH 645 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 634 - Signals and Systems II
Credits: 3
Transient response analysis of linear systems using Laplace transforms, application to feedback control systems. Introduction to discrete-time linear systems; system response determination using Z-transform; elementary design of digital filters and controllers. State variable formulation of dynamical systems.
Prerequisite(s): ECE 633 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 647 - Random Processes and Signals in Engineering
Credits: 3
Emphasis on applied engineering concepts such as component failure, quality control, noise propagation. Topics include random variables, probability distributions, mean and variance, conditional probability, correlation, power spectral density.
Prerequisite(s): MATH 426 with a minimum grade of D- and ECE 602 with a minimum grade of D-.
Equivalent(s): ECE 647H
Grade Mode: Letter Grading

ECE 647H - Honors/Random Processes and Signals
Credits: 4
Emphasis on applied engineering concepts such as component failure, quality control, noise propagation. Topics include random variables, probability distributions, mean and variance, conditional probability, correlation, power spectral density. Honors students attend an additional one-hour meeting each week.
Attributes: Honors course
Prerequisite(s): MATH 426 with a minimum grade of D- and ECE 602 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 649 - Embedded Microcomputer Based Design
Credits: 6
This course covers topics related to architectures for embedded processors, hardware and software aspects of interfacing, handling interrupts, low-level programming including debugging of real-time systems, and embedded application implementations. Laboratory exercises will reinforce theoretical and applied concepts using an embedded architecture and develop report writing skills. Programming experience required. This course is required for CE majors and is optional for EE majors.
Attributes: Writing Intensive Course
Prerequisite(s): ECE 562 with a minimum grade of D- and ECE 583 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 652 - Electronic Design II
Credits: 6
Design of fundamental circuit blocks in electronic systems. Multistage amplifiers; feedback systems and stability; power amplifiers. Laboratory exercises in the design and analysis of active circuits. Application of laboratory instrumentation to the investigation of active circuit characteristics; computer-aided design, analysis, and testing; development of report writing skills. This course is required of EE majors, but it is not required of CE majors.
Prerequisite(s): ECE 548 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 653 - Electronic Design III
Credits: 6
Continuation of ECE 652 with emphasis on more advanced circuits including: active filters, Nonlinear electronic circuits: oscillators, function generators, phase-locked loops; clippers and peak detectors; A/D and D/A conversion, switching mode circuits. Laboratory exercises in the design and analysis of active circuits. Further advanced application of laboratory instrumentation to the investigation of active circuit characteristics; computer-aided design, analysis, and testing; development of report writing skills. This course is required of EE majors, but it is not required of CE majors.
Attributes: Writing Intensive Course
Prerequisite(s): ECE 652 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 712 - Advanced Digital Systems Design and Verification
Credits: 4
This course will introduce standard on-chip communication networks for digital systems, off-chip wired/wireless communication protocols and the implementation of standard I/O interfaces. This course will also teach the advanced FPGA architecture, design flow, and debugging methods, and reinforce students' prototyping skills on standalone FPGAs and cloud FPGAs. Modern digital design and optimization techniques will be presented and examined, as well. Reliability and security issues in digital system design will be emphasized in this course.
Prerequisite(s): ECE 543 with a minimum grade of D- and ECE 562 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 714 - Introduction to Digital Signal Processing
Credits: 4
Introduction to digital signal processing theory and practice, including coverage of discrete time signals and systems, frequency domain transforms and practical spectral analysis, digital filter terminology and design, and sampling and reconstruction of continuous time signals. Laboratory component providing an introduction to DSP design tools and real-time algorithm implementation. Lab.
Prerequisite(s): ECE 634 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 715 - Introduction to VLSI
Credits: 4
Principles of VLSI (Very Large Scale Integration) systems at the physical level. CMOS circuit and logic design, CAD tools, CMOS system case studies. Students exercise the whole development cycle of a VLSI chip: design and layout with the up-to-date commercial EDA tools. An IA (continuous grading) grade is given at the end of semester I. Lab.
Grade Mode: Letter Grading

ECE 717 - Introduction to Digital Image Processing
Credits: 4
Digital image representation; elements of digital processing systems; multidimensional sampling and quantization; image perception by humans, image transformations including the Fourier, the Walsh, and the Hough Transforms; image enhancement techniques including image smoothing, sharpening, histogram equalization, and pseudo color processing; image restoration fundamentals; image compression techniques, image segmentation and use of descriptors for image representation and classification. Lab.
Prerequisite(s): ECE 634 with a minimum grade of D- and ECE 647 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 757 - Fundamentals of Communication Systems
Credits: 4
Spectra of deterministic and random signals; baseband and bandpass digital and analog signaling techniques; transmitter and receiver architectures; performance analysis of digital and analog signaling in additive noise channels; carrier and symbol timing synchronization methods. Lab.
Prerequisite(s): ECE 634 with a minimum grade of D- and ECE 647 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 772 - Control Systems
Credits: 4
Development of advanced control system design concepts such as Nyquist analysis; lead-lag compensation; state feedback; parameter sensitivity; controllability; observability; introduction to non-linear and modern control. Includes interactive computer-aided design and real-time digital control. Lab.
Prerequisite(s): ECE 634 with a minimum grade of D-.
Equivalent(s): ME 772
Grade Mode: Letter Grading

ECE 775 - Applications of Integrated Circuits
Credits: 4
Design and construction of linear and nonlinear electronic circuits using existing integrated circuits. Limitations and use of operational amplifiers. Laboratory course in practical applications of non-digital integrated circuit devices. Lab.
Prerequisite(s): ECE 651 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 784 - Biomedical Instrumentation
Credits: 4
Principles of physiological and biological instrumentation design including transducers, signal conditioning, recording equipment, and patient safety. Laboratory includes the design and use of instrumentation for electrocardiography, electromyography, electroencephalography, pulse measurement, blood pressure, phonocardiography, spirometry, and temperature. Current research topics such as biotelemetry, ultrasonic diagnosis, and computer applications.
Prerequisite(s): ECE 548 with a minimum grade of D- or ECE 537 with a minimum grade of D-.
Grade Mode: Letter Grading

ECE 791 - Senior Project I
Credits: 3
First semester of the capstone design experience. Topics include creativity, design methodology, specification development, project management, ethics, safety, reliability and preparation for oral and written reports. Students develop project plans, and prepare and present written and oral project proposals. The project plans must include aspects of design, implementation and evaluation. At the end of the semester, students prepare a written progress report. All ECE Core Course Requirements must be met prior to enrolling in Senior Project I.
Attributes: Writing Intensive Course
Equivalent(s): ECE 791H
Grade Mode: Letter Grading

ECE 791H - Senior Honors Project I
Credits: 4
First semester of the capstone honors senior thesis research. Topics include creativity, design methodology, specification development, project management, ethics, safety, reliability and preparation for oral and written reports. Students develop project plans, and prepare and present written and oral project proposals. The project plans must include aspects of design, implementation and evaluation, similar to ECE 791. However, honors thesis research must also include independent research beyond the normal scope of ECE 791. At the end of the semester students prepare a written progress report. All ECE Core Course Requirements must be met prior to enrolling in Senior Honors Project I.
Attributes: Honors course; Writing Intensive Course
Equivalent(s): ECE 791
Grade Mode: Letter Grading

ECE 792 - Senior Project II
Credits: 3
This course requires the completion of the capstone design experience begun in ECE 791. At the end of the semester students prepare written final project reports, and present their results in a research poster session.
Attributes: Writing Intensive Course
Prerequisite(s): ECE 791 with a minimum grade of D-.
Equivalent(s): ECE 792H
Grade Mode: Letter Grading

ECE 792H - Senior Honors Project II
Credits: 4
This course requires the completion of the capstone honors thesis research begun in ECE 791H. At the end of the semester students prepare honors theses, and present their research results in a research poster session. ECE 791H/792H fulfills the requirement of one professional elective.
Attributes: Honors course; Writing Intensive Course
Prerequisite(s): ECE 791H with a minimum grade of D-.
Equivalent(s): ECE 792
Grade Mode: Letter Grading

ECE 795 - Electrical and Computer Engineering Projects
Credits: 1-4
Laboratory course. Student undertakes a project of mutual interest with an ECE faculty advisor. A written final report must be filed with the ECE Department.
Grade Mode: Letter Grading

ECE 796 - Special Topics
Credits: 1-4
New or specialized courses and/or independent study. 1 to 4 credits some sections may use credit/fail grading.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

Engineering Technology (ET)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ET 401 - Introduction to 3D Printing
Credits: 4
This project-based course explores the latest techniques in designing and fabricating 3D models using 3D printing technology. Through the integration of techniques from mathematics, engineering, and computing, students learn to design 3D models and manufacture them using 3D printers. The course challenges students to apply their skills in a variety of engineering projects that require creative problem-solving and critical thinking.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

ET 405 - Engineering Design
Credits: 4
This course introduces the engineering design process and solid modeling software tools to create 3D CAD models and generate professional industry engineering drawings. Industry codes and procedures are practiced e.g. Geometric Dimensioning & Tolerancing (GD&T). Students complete hands-on projects and activities. The engineering design process includes: problem identification, concept creation, modeling, analysis, and documentation. Industry standard 3D modeling software is used with project design methodology for graphical, written, and oral communication of mechanical design ideas.
Attributes: Inquiry (Discovery)
Grade Mode: Letter Grading

ET 411 - Manufacturing and Materials Processing
Credits: 0 or 4
This course covers the basic manufacturing processes used to convert raw materials into finished goods. Various manufacturing methods including both traditional and computer controlled covered include: machining, forming, casting, welding, 3D printing. The complex relationship between design and manufacturability is investigated and emphasized. The lab portion of this course will demonstrate the use of various machining processes which are capable in the UNHM Machine Shop Lab.
Prerequisite(s): MATH 418 with a minimum grade of C- and ET 405 with a minimum grade of C-.
Grade Mode: Letter Grading
Special Fee: Yes

ET 421 - Digital Electronics I
Credits: 0 or 4
The fundamental analysis and design concepts of digital theory needed for more advanced study of digital circuits. Topics covered include: number systems, codes, Boolean algebra, K-mapping, and combinational, sequential digital circuits. Lab exercises explore modern integrated circuit technology and introductory design using Electronic Design Automation (EDA) tools.
Co-requisite: COMP 424
Prerequisite(s): MATH 418 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 431 - Circuit Analysis I
Credits: 0 or 4
First course in electronic circuit analysis exploring the fundamental idea of current and voltage. Topics include the basic laws and theorems that govern simple electrical systems; Kirchoff's laws, Ohm's law, power relationships, resistance, inductance, and capacitance. Laboratory exercises will introduce the student to the basic measurement techniques of electronic systems using circuit building, power supplies, multi-meters and oscilloscopes. This course will also introduce basic circuit simulation techniques.
Prerequisite(s): MATH 418 (may be taken concurrently) with a minimum grade of C-.
Grade Mode: Letter Grading

ET 432 - Circuit Analysis II
Credits: 0 or 4
Second course in electronic circuit analysis, introducing time varying circuits and more advanced electronic circuit analysis; including super position, node/mesh methods, phasor representation, frequency response, impedance, and reactance. Lab exercises use oscilloscopes, function generators to build and analyze circuits with reactive elements.
Co-requisite: MATH 425
Prerequisite(s): MATH 418 with a minimum grade of C- and ET 431 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 450 - Statics and Strength of Materials
Credits: 0 or 4
The statics portion of the course analyzes equilibrium force systems applied to rigid bodies and the internal stresses and strains which result. The strength of materials portion of the course investigates the relationship between internal stress and strain to material properties and behavior. Topics include free body diagrams, equilibrium force analysis, tension, compression, shear and moment diagrams, torsion, bending, trusses, and beam deflection analysis. Lab.
Prerequisite(s): MATH 418 with a minimum grade of C- and (PHYS 407 (may be taken concurrently) with a minimum grade of C- or PHYS 407S (may be taken concurrently) with a minimum grade of C- or PHYS 407H (may be taken concurrently) with a minimum grade of C-).
Grade Mode: Letter Grading

ET 502 - Measurement and Control
Credits: 0 or 4
The course covers basic electricity and electronics (analog and digital) and electronic components (transistors, op-amps, SCR's). Electromechanical principles are introduced involving sensors and transducers used in production processes. Programming using the Arduino software and microcontroller is introduced. The basics of Programmable Logic Control (PLC) using Relay Ladder Logic programming is covered. Students use both hardware and software covered in the lecture portion of the course in the laboratory session.
Prerequisite(s): MATH 418 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 505 - Material Science
Credits: 0 or 4
This course studies the properties and behavior of engineering materials. Materials considered are ferrous and nonferrous metals and alloys, as well as plastics, ceramics, and composites. Material property and behavior modification through thermal and mechanical means is studied: such as heat treatment of steel or cold work forming. Selection of materials based upon manufacturing and design requirements is emphasized. Lab experiments will complement lecture material where appropriate.
Prerequisite(s): MATH 425 with a minimum grade of C- and ET 450 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 522 - Digital Electronics II
Credits: 0 or 4
Advanced topics in digital design techniques. Topics covered include: complex digital circuits, Flip-Flop circuits, counters, state machines, state diagrams, and memory devices. Laboratory exercises work with modern digital design methods with schematic entry, synthesis using VHDL, simulation modern digital systems implemented on Field Programmable Gate Arrays (FPGA).
Prerequisite(s): ET 421 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 541 - Electronic Devices
Credits: 4
Introductory course in Electronic devices looking at modern components used in current electronic systems. This course will develop techniques to analyze basic semiconductor devices such as diodes, field effect transistors and bipolar transistors. Specific diode circuits covered include: rectifying, clipping, and clamping circuit configurations. Methods to model, analyze and bias the basic transistor amplification circuits will be developed. Lab exercises will explore these types of circuit both in physical prototyping and simulation.
Prerequisite(s): MATH 425 with a minimum grade of C- and ET 431 with a minimum grade of C- and ET 432 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 542 - Analog Electronics
Credits: 0 or 4
Design of fundamental analog circuit blocks in electronic systems. Multistage amplifiers; feedback systems and stability; power amplifiers. Nonlinear electronic circuits: oscillators, function generators; clippers and peak detectors; A/D and D/A conversion. Laboratory exercises will explore building physical prototypes and the use of simulation to build and analyze Analog systems.
Grade Mode: Letter Grading

ET 550 - Dynamics and Machine Design I
Credits: 0 or 4
The dynamics portion of the course covers basic fundamentals of particle and rigid body dynamics, rectilinear and curvilinear motion, and kinematic motion. The machine design portion covers static and dynamic stress analysis theories, combined stress, and fatigue and endurance strength. Introduction to various machine element analyses are begun including fasteners, springs, and shaft design. Computer applications are employed where appropriate using CAD and Excel. Lab.
Prerequisite(s): ET 405 with a minimum grade of C- and ET 450 with a minimum grade of C- and MATH 425 (may be taken concurrently) with a minimum grade of C-.
Grade Mode: Letter Grading

ET 560 - Machine Design II
Credits: 0 or 4
This course is a continuation of ET 550 Machine Design portion. Additional machine elements and their related analyses are covered. Power transmission drive components such as gears, belts, chains, clutches and brakes are covered. Lab projects will involve individual components or combined items above. Computer application software is used where appropriate, including CAD and Excel. Lab.
Prerequisite(s): ET 550 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 590 - Embedded Microcontrollers
Credits: 0 or 4
The purpose of this course is to explore the subject of microprocessors and embedded systems, covering architectural issues, programming, and interfacing. The course will also cover processor organization, emphasizing the typical structure of today's microcontrollers, processor models, and programming styles. Throughout the material, the consideration of input/output systems to the use of various embedded peripherals and interfacing external loads for a spectrum of diverse applications will be addressed.
Prerequisite(s): ET 522 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 625 - Technical Communications
Credits: 4
Designed to improve students' capabilities to prepare and present technical information in written and oral form and through electronic means. ET majors should take this course early in their program of study so that proficiencies developed can be utilized in later courses. (Also listed as ENGL 502.)
Attributes: Writing Intensive Course
Equivalent(s): ENGL 502, ENGL 502H
Grade Mode: Letter Grading

ET 635 - Fluid Technology and Heat Transfer
Credits: 0 or 4
Fundamental principles of fluid technology and basic principles of heat transfer, with applications in solving practical problems, and how these concepts are used in the HVAC area. Lab.
Prerequisite(s): ET 529 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 641 - Production Systems
Credits: 4
Market forecasting; waiting line theory; manufacturing inventories and their control; production scheduling; quality control.
Prerequisite(s): MATH 425 with a minimum grade of C-.
Grade Mode: Letter Grading
Special Fee: Yes

ET 644 - Mechanical Engineering Technology Concepts in Analysis and Design
Credits: 4
Kinematics, kinetics, work and energy, fluids, heat transfer; application of these concepts to problems in mechanical design.
Prerequisite(s): ET 450 with a minimum grade of C- and ET 560 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 645 - Fluid Technology and Heat Transfer II
Credits: 0 or 4
The course prepares the student to apply thermal and fluid engineering principles to situations typical of those encountered in industry. Topics covered include thermodynamics of two phase fluids, fluid dynamics of piping systems, principles of turbomachinery, and analysis of power cycles. No credit for students who have taken ET 696 Special Topics in Mechanical Engineering Technology for credit. Lab.
Prerequisite(s): ET 635 with a minimum grade of C- and MATH 425 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 660 - FPGA Design with HDL
Credits: 4
This course covers the design and verification of various digital blocks with a hardware description language and their implementations in an FPGA (Field Programmable Gate Array) using an integrated design tool.
Prerequisite(s): ET 590 with a minimum grade of D- and COMP 424 with a minimum grade of D-.
Grade Mode: Letter Grading

ET 671 - Digital Systems
Credits: 0 or 4
Digital systems design and application using TTL and CMOS devices, design of systems, and interfacing. Digital design project required. Lab.
Prerequisite(s): ET 522 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 674 - Control Systems and Components
Credits: 0 or 4
Topics include linear systems analysis, the Laplace transform and its properties, controllers, root locus technique, transient response analysis, first- and second-order systems, error analysis, and control system design. Lab.
Prerequisite(s): MATH 425 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 675 - Electrical Technology
Credits: 0 or 4
Electrical circuits: DC and AC network analysis, power factors, transformers, power supplies. Electronic circuits--diodes, transistors and operational amplifiers. Digital circuits and introduction to computer-aided engineering. Lab.
Prerequisite(s): MATH 425 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 677 - Analog Systems
Credits: 0 or 4
Operational amplifiers. Transducers and measurement systems. Frequency response. Grounding and shielding. Signal and power interfacing techniques. Design project. Lab.
Prerequisite(s): ET 542 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 680 - Communications and Fields
Credits: 0 or 4
Topics include Fourier series analysis; the Fourier transform and its properties; convolution; correlation including PN sequences; modulation theory; encoding and decoding of digital data (NRZ-M, NRZ-S, RZ, Biphase-L, and Manchester); antennas and antenna pattern; Radar Range Equation; and an introduction to information theory. Lab.
Prerequisite(s): MATH 425 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 751 - Mechanical Engineering Technology Project
Credits: 4 or 8
Students are required to find solutions to technological problems in design, fabrication, and testing as posed in industry. Students define the problem, create a schedule and budget, and work on a team to research, design, build, and test the software and hardware needed. Senior standing in the ET program required. This is a two-semester, year-long course: 4 credits per semester, a letter grade is given at the end of each semester. Withdrawal from course results in loss of credit.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ET 781 - Introduction to Automation Engineering
Credits: 4
Students are introduced to the topics needed to develop a good understanding of the basic principles of Automation Engineering. This introductory course covers a wide variety of topics such as performance of sensors, actuators, motors and drives, PLC's and HMI, environmental controls , robots, machine vision systems, and controls and system integration. Open to Electrical Engineering Technology, and Mechanical Engineering Technology majors only.
Grade Mode: Letter Grading

ET 788 - Introduction to Digital Signal Processing
Credits: 0 or 4
This course will deal with the topics of spectral representation of periodic and non-periodic analog signals followed by discrete sampling and aliasing and how it relates to Nyquist sampling theorem. The z-transform will be introduced as the required mathematical tool along with an introduction to MATLAB and its associated DSP tool box. Spectral analysis of digital signal will be accomplished using these tools. Convolution and digital filtering will also be covered. Lab.
Prerequisite(s): ET 680 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 790 - Microcomputer Technology
Credits: 0 or 4
This course explores modern microprocessor technology, focusing on microcontroller units (MCUs) for embedded systems. The topics include MCU structure, volatile and non-volatile memories, versatile input/output blocks, analog components, instruction set architecture, and assembly language programming. Laboratory work provides various C programming exercises with the Texas Instruments MSP430, a 16-bit MCU.
Prerequisite(s): ET 671 with a minimum grade of C-.
Grade Mode: Letter Grading

ET 791 - Electrical Engineering Technology Project
Credits: 4 or 8
Students are required to find solutions to technological problems in design, fabrication, and testing as posed in industry. Students define the problem, create a schedule and budget, and work on a team to research, design, build, and test the software and hardware needed. Senior standing in the ET program required. This is a two-semester, year-long course: 4 credits per semester, a letter grade is given at the end of each semester. Withdrawal from course results in loss of credit.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

English (ENG) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ENG 420 - The Writing Process
Credits: 4
This course introduces students to the foundational concepts and skills needed to communicate effectively in writing for academic study and professional development. Students will learn how to use the four stages of the writing process - prewriting, drafting, revising, and editing - to create written communication that meets its intended purpose for its intended audience. Students will also be introduced to rhetorical styles and the role of outside sources in academic writing. Constructing and implementing effectively-designed search strategies for information to answer a critical inquiry or research question are also addressed in this course.
Attributes: English (Gen Ed); Writing Intensive Course
Equivalent(s): ENG 500G
Mutual Exclusion: No credit for students who have taken ENGL 401.
Grade Mode: Letter Grading

ENG 450 - Introduction to Literature
Credits: 4
This writing and reading intensive course is foremost intended to increase students' exposure to and appreciation of literature in its many forms. Students will therefore read and discuss the primary genres of poetry, the short story, drama, and the novel. The second goal of the course is to hone students' abilities to read, write, and think critically about the ways in which human experience itself is shaped by language in literary texts. Through the development of literary analysis skills and the practice of writing about literature, students will learn to communicate meaningfully about literature as an art form with aesthetic, social, cultural, and political significance.
Attributes: Human Thought Exp (Gen Ed); Humanities(Disc); Writing Intensive Course
Prerequisite(s): (CRIT 501 with a minimum grade of D- or CRIT 501G with a minimum grade of D-) and (ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D- or ENGL 401 with a minimum grade of D-).
Equivalent(s): ENG 504G
Grade Mode: Letter Grading

ENG 505 - Introduction to Language and Linguistics
Credits: 4
This course promotes meaningful literacy instruction through the study of language, language acquisition, the study of sounds and sound formation, word formation, and how words combine into larger meaningful units. The prescriptive standardization of such language forms as spelling, semantics, pronunciation, style, and register are addressed in this course. Basic components of descriptive grammar, to include syntax, semantics, phonology, and morphology are applied. Students will have the opportunity to develop an appreciation for regional and ethnic dialects and examine how language changes and develops over time.
Attributes: Human Thought Exp (Gen Ed); Writing Intensive Course
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-.
Equivalent(s): ENG 505G
Grade Mode: Letter Grading

ENG 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in English. Course content changes from term to term.
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): ENG 544G
Grade Mode: Letter Grading

ENG 545 - The Media and Its Messages
Credits: 4
Grounded within the context of media studies, this course engages students in a critical and analytical exploration of the media and its influences on American culture and society. The course examines the various ways that the media functions as both a lens for interpreting culture and a tool through which culture is shaped. Through critical engagement with various forms of media, students explore the roles of film, visual art, television, music, mass media, and web- based media in shaping their understanding of literature, writing, and culture.
Attributes: Environment,TechSociety(Disc); Human Thought Exp (Gen Ed); Writing Intensive Course
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-.
Equivalent(s): ENG 508G
Grade Mode: Letter Grading

ENG 555 - Children's Literature
Credits: 4
What are the qualities that make a particular work of children's literature endure? Why do some deceptively simple books remain favorites for years? Citing the work of psychologists, art historians, educators, and authors, students explore these and similar questions. The course considers picture books, traditional literature, and Young Adult novels. Students prepare annotated bibliographies of various genres, taking a personal look at the important role particular books play in the moral and social development of children.
Attributes: Human Thought Exp (Gen Ed); Humanities(Disc)
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D- or ENGL 401 with a minimum grade of D-.
Equivalent(s): ENG 555G
Grade Mode: Letter Grading

ENG 565 - Modern American Writers 1865 to the Present
Credits: 4
For the past 150 years, American writers have grappled with the concept of what America is and what it might become. By reading fiction, poetry, drama, and non-fiction from 1865 to the present, this course explores how modern writers have shaped--and revealed--American identities. Readings may include authors of "Local Color" writing, Realism, the "Lost Generation," and the Postmodern era, as well as writers of the Harlem, Southern, and Native American Renaissances, in their historical, literary, and cultural contexts. Through reading, writing, and research, learners will interrogate evolving American experiences.
Attributes: Human Thought Exp (Gen Ed); Humanities(Disc)
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D- or ENGL 401 with a minimum grade of D-.
Equivalent(s): ENG 510G
Grade Mode: Letter Grading

ENG 585 - Short Fiction
Credits: 4
This class focuses on late 19th through early 21st century short fiction, including both the short story and the novella. Readings and discussion of primary works by selected authors combine with study of secondary commentaries that outline the evolution of and theories about the genre. Students develop a basis for interpreting complex texts and for analyzing the techniques and characteristics that give short fiction its distinctive literary flavor.
Attributes: Human Thought Exp (Gen Ed); Writing Intensive Course
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-.
Equivalent(s): ENG 633G
Grade Mode: Letter Grading

ENG 590 - Expository Writing
Credits: 4
This course extends and refines writing, reading, and critical thinking skills. Through analysis of texts, study of language as a symbol system, and exploration of advanced expository and persuasive techniques, students identify and apply effective strategies for creating and communicating meaning in their own essays. Writing within the course integrates research and citation in ways that are appropriate to the individual learner's chosen field of study. The workshop format of the course includes class discussion, individual conferences with the instructor, and peer critique of work in progress.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 501 with a minimum grade of D- or CRIT 501G with a minimum grade of D-) and (ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-).
Equivalent(s): ENG 600G
Grade Mode: Letter Grading

ENG 604 - Creative Writing
Credits: 4
The goal of this course is for students to develop their own capacity for creative expression by writing in fiction, poetry, and other genres using the major craft forms and elements of the genre. They will also generate strategies for reading and interpreting contemporary published writing in the same genres. A workshop format will be used for students to learn how discussing works in progress with other writers can advance their own creative expression and support the creative expression of others. The workshop format will also introduce students to the unique challenges posed by the revision process in reworking an original creative work for an external audience.
Attributes: FinePerformingArts(Discovery); Human Thought Exp (Gen Ed); Writing Intensive Course
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-.
Equivalent(s): ENG 604G
Grade Mode: Letter Grading

ENG 610 - War Writing in the 21st Century
Credits: 4
This course is designed to bridge the ever-widening civilian-military gap in the United States by examining the twenty-first century war experience through literature. The course will explore stories in multiple genres such as fiction, poetry, memoir, drama, and blogs to gain insights into the value of stories portraying combat and its aftermath. The course will also explore representations of military families on the home front. In addition to assigned readings, learners will have the opportunity to design research projects tailored to their own interests. This course provides insight to those who work with veterans and/or military families in the fields of behavioral health, health care, business, or education, and to anyone exercising their civic duties in a democracy.
Attributes: Human Thought Exp (Gen Ed); Writing Intensive Course
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-.
Equivalent(s): ENG 550G
Grade Mode: Letter Grading

ENG 615 - Young Adult Literature
Credits: 4
This course explores a wide range of literature for young adults, along with social and literary criticism that help to illuminate the impact of this literature. Through readings and discussion of both current and classic literature, students identify why literature is a powerful tool and how it can help young adults shape their lives. Learners respond to young adult literature through written analyses and critiques.
Attributes: Human Thought Exp (Gen Ed); Humanities(Disc)
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D- or ENGL 401 with a minimum grade of D-.
Equivalent(s): ENG 560G
Grade Mode: Letter Grading

ENG 620 - Multicultural Perspectives through Literature
Credits: 4
As the new realities of the global village erode long-standing assumptions about discrete nationhood and fixed cultures, the concept of what it means to be an American is also shifting. Through representative literary works, this course explores the challenges individuals from various ethnic, racial, and cultural backgrounds confront within a pluralistic society. Students construct a more inclusive definition of culture, assess traditional attitudes about race and ethnicity, and appreciate just how deeply Native, African, Hispanic, Asian, and European Americans have enriched our national identity.
Attributes: Human Thought Exp (Gen Ed); Humanities(Disc)
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D- or ENGL 401 with a minimum grade of D-.
Equivalent(s): ENG 620G
Grade Mode: Letter Grading

ENG 625 - Readings in World Literature
Credits: 4
This course surveys representative texts in English by writers around the world, past and present. Readings from diverse periods and genres introduce major themes, movements, and topics in selected works from any or all of the following: antiquity, Europe, Asia, Africa, Latin America, the Caribbean, and the Pacific. Discussions of political, historical, and cultural contexts suggest the powerful forces that have shaped and continue to influence literary forms and traditions outside the U.S. and Britain.
Attributes: Human Thought Exp (Gen Ed)
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-.
Equivalent(s): ENG 625G
Grade Mode: Letter Grading

ENG 644 - Special Topics: Upper Level
Credits: 1-4
A study of current and variable topics in English. Course content changes from term to term. It is expected that the student will have prior coursework or experience in the subject matter.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): ENG 644G
Grade Mode: Letter Grading

ENG 645 - Disability in Literature and Culture
Credits: 4
This course provides students with an in-depth study of how the portrayal of people with disabilities of many kinds - physical, emotional, social, and mental - in literature is reflective of the social and historical context in which it was written. Students apply close textual analysis of the imagery used to describe people with disabilities and evaluate the cultural attitudes this use of language reveals. Students read literature written by both disabled and non-disabled authors and analyze the ways that many stereotypical portrayals of disability undermine the disability community. Questions of how a culture decides what is "normal," how portrayals of the disability experience in literature differ between adults and children, and how the advocacy role is portrayed in literature are also examined. The goal of this course is to discover how literature can challenge our own assumptions about the experience of the disabled by contemplating what ultimately makes us human.
Attributes: Human Thought Exp (Gen Ed); Writing Intensive Course
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-.
Equivalent(s): ENG 645G
Grade Mode: Letter Grading

ENG 675 - Survey of Classic Literature Through Film
Credits: 4
This course explores the interaction between film and literature in order to introduce students to major literary texts and their adaptations through film. Students will have the opportunity to read and analyze a selection of novels, plays, and poetry from major American and British writers. The course invites students to investigate cinematic interpretations of major works, and to position them within their historical and cultural contexts (taking careful consideration of portrayals of race, gender, class, religion, and sexuality). Students will practice analyzing literary text and film, and engage in scholarly and critical research. Additionally, they will use their work over the course of the semester to either create their own research on the topic or develop a lesson plan that incorporates literature and film for K-12 students. Selections of texts and films will represent commonly taught works.
Attributes: Human Thought Exp (Gen Ed)
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D- or Has Accred Associate Deg with a score of WAIV or Has Accred Bachelor Deg with a score of WAIV.
Equivalent(s): ENG 636G
Grade Mode: Letter Grading

ENG 730 - The Graphic Novel
Credits: 4
This course will explore several different kinds of graphic novellas, memoir, fantasy, social critiques, adaptations, etc. in an effort to understand how writers and illustrators weave words and images together to create meaning in unique ways that transcend traditional genres and harness new modes of expression. The students will have an opportunity to broaden their knowledge and appreciation of graphic novels as they apply critical concepts to their study and produce their own comics. Recommended: ART 401 and CRIT 501.
Attributes: Human Thought Exp (Gen Ed)
Prerequisite(s): ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-.
Equivalent(s): ENG 630G
Grade Mode: Letter Grading

English (ENGL)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ENGL 401 - First-Year Writing
Credits: 4
Training to write more skillfully and to read with more appreciation and discernment. Frequent individual conferences for every student.
Attributes: Writing Skills(Discovery); Writing Intensive Course
Equivalent(s): ENGL 401A, ENGL 401H
Mutual Exclusion: No credit for students who have taken ENG 420.
Grade Mode: Letter Grading

ENGL 401H - Honors/First-Year Writing
Credits: 4
Training to write more skillfully and to read with more appreciation and discernment. Frequent individual conferences for every student.
Attributes: Honors course; Writing Skills(Discovery); Writing Intensive Course
Equivalent(s): ENGL 401, ENGL 401A
Grade Mode: Letter Grading

ENGL 405 - Introduction to Linguistics
Credits: 4
Overview of the study of language: universal properties of human language, Chomsky's innateness of hypothesis, language acquisition in children, dialects and language variation, language change. Includes introduction to modern grammar (phonology, syntax, semantics) and to scientific linguistic methodology.
Attributes: Social Science (Discovery); Inquiry (Discovery)
Equivalent(s): ENGL 405H, LING 405, LING 405H
Grade Mode: Letter Grading

ENGL 415C - Literature and Medicine
Credits: 4
Literary representations of medical practice are used to prompt discussion of broad issues concerning medical philosophy and medical ethics, the image of the medical professional in the media, differing conceptions of healing in various social contexts worldwide, and changes in biological science and medicine on the larger society. Ideal for students interested in: Health Care, Biomedical Sciences, Physical therapy, and Nutrition.
Attributes: Humanities(Disc); Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of B or ENGL 401H with a minimum grade of B.
Equivalent(s): ENGL 415A, ENGL 415B, ENGL 415E, ENGL 415F, ENGL 415G, ENGL 415J
Grade Mode: Letter Grading

ENGL 419 - How to Read Anything
Credits: 4
Whether epic or tweet, song lyric or script, English 419 prepares you for close, detailed, and critical readings and for writing with clarity and precision. You'll discover selected prose, poetry, plays and films from across the English-speaking world throughout history. Whatever your major, this course develops skills in research, writing, and critical thinking. Prerequisite (with minimum grade of C) for declaring one of the four majors or two options offered in the English Department.
Attributes: Inquiry (Discovery); Writing Intensive Course
Equivalent(s): ENGL 419H
Grade Mode: Letter Grading

ENGL 440A - Honors/On Race in Culture and Society
Credits: 4
Of our special concern will be the claim that race is a culturally or socially, not biologically, constructed category. The reading list will include literary texts (Toni Morrison's "Recitatif"), works of African American comedians (Bill Cosby, Richard Pryor, Eddie Murphy, etc.), philosophical texts (Immanuel Kant, W.E.B. DuBois, K.A. Appiah, etc.) as well as some legal documents (recent U.S. Supreme Court decisions concerning affirmative action). We will also do two case studies, one on the name of Redskins and one the Whiteness Project. The general goal of the course is to improve the student's ability to speak and think critically about race and race relations in the U.S.
Attributes: Honors course; Humanities(Disc); Writing Intensive Course
Grade Mode: Letter Grading

ENGL 440B - Honors/Seeing is Believing: How the Copernican Revolution Changed the Way We See Ourselves
Credits: 4
This course explores the various ways that scientists, philosophers, poets, novelists, and literary theorists have tried to reconcile what we see (or think we see) with what we know (or think we know), from the ancient past to the 21st century. Our special focus will be on how the Copernican Revolution prompted a wholesale reevaluation of perception and knowledge. We will explore how writers, artists musicians, and philosophers embraced or lamented the enormous cultural and psychological changes that the Copernican evolution helped to introduce. We also will investigate how these changes continue to shape our worldview in the 21st-century.
Attributes: Honors course; Humanities(Disc)
Grade Mode: Letter Grading

ENGL 444D - The Irish Experience
Credits: 4
Explores the historical causes and literary effects of emigration from Ireland to other regions in the North and South Atlantic. Considers the political and economic conditions of Ireland itself and asks how Irish identities are first formed dialectically through contact with indigenous others and then nostalgically constituted through the experience of migration.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

ENGL 444N - Monsters!!!
Credits: 4
This course will introduce students to a number of critical thinking processes by examining one of the most symbolically significant human archetypes, Monsters. By engaging works of historical significance and popular texts, students will explore a familiar subject from historical, political, psychological, and literary points of view.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

ENGL 501 - Introduction to Creative Nonfiction
Credits: 4
A writing course that explores types of creative nonfiction such as nature writing, the profile, the memoir, and the personal essay. Extensive reading of contemporary authors to study the sources and techniques used in creative nonfiction. Regular papers, conferences, and workshops.
Attributes: FinePerformingArts(Discovery); Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Equivalent(s): ENGL 501H
Grade Mode: Letter Grading

ENGL 502 - Professional and Technical Writing
Credits: 4
A writing course introducing students to the effective communication of technical information through various workplace documents including resumes, memos, business letters, reports, brochures, etc. Special emphasis on an introduction to professional conventions and genres and to the transferable skills of rhetorical and audience analysis, document design and collaborative work.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Equivalent(s): ENGL 502H, ET 625
Grade Mode: Letter Grading

ENGL 503 - Persuasive Writing
Credits: 4
Writing of all types of persuasive nonfiction prose, including argumentative essays and position papers. Special attention to argumentative structures and analysis of audiences. Weekly papers of varying lengths and formats, frequent conferences.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 504 - Resume Writing
Credits: 2
Write your resume now! Readings from recruiters, scholars, and managers reveal what employers want in resumes and cover letters, and what they don't want. Topics include: understanding ATS (applicant tracking systems); analyzing purpose and audience; learning cutting-edge designs; writing detailed and efficient content; tailoring your resume to the job advertisement; writing persuasive cover letters; and formatting and editing tips. Students will identify two job advertisements and write a resume and letter for each.
Grade Mode: Credit/Fail Grading

ENGL 512 - British Literature I Age of Heroes: Beowulf to Dr. Faustus
Credits: 4
An introduction to the earliest poetry, prose and drama in English, considered in chronological order and in historical context. Examine important literary works as the old English epic Beowulf, Chaucer's entertaining collection Canterbury Tales, the Arthurian romance Sir Gawain and the Green Knight, the devotional autobiography The Book of Margery Kempe, the sermon in dramatic form Everyman, Edmund's Spenser's chivalric saga The Faerie Queen and the sonnets of Philip Sidney and William Shakespeare.
Attributes: Humanities(Disc); Writing Intensive Course
Grade Mode: Letter Grading

ENGL 513W - British Literature II Age of Revolutions: Shakespeare to Austen
Credits: 4
The English literary tradition from the Renaissance to the early Romantics spans a period of great social tumult. It includes civil war, new ideas in science, theology, and politics, and expanding British power abroad. Amidst such change flourished reinvented classical genres like the epic, satire, and stage comedy, as well as new forms like the novel, the pamphlet and the newspaper. This class provides a brisk survey of the revolutionary literature of this fascinating age.
Attributes: Humanities(Disc); Writing Intensive Course
Equivalent(s): ENG 513H, ENGL 513
Grade Mode: Letter Grading

ENGL 514 - British Literature III: Revolts, Renewals, Migrations
Credits: 4
Encounter the Romantic fantasies of John Keats's nature poetry and Mary Shelley's Frankenstein, the Victorian novels that brought us Jane Eyre, Ebenezer Scrooge and Mr. Hyde, the experiments of Modernists like Virginia Woolf and James Joyce, and Postmodern transformations by a shifting cast of contemporaries. We'll read these works in the context of imperial expansion and contraction, the crises of world wars, and the civil rights and independence struggles of the 20th and 21st centuries.
Attributes: Humanities(Disc)
Equivalent(s): ENGL 514H, ENGL 514W
Grade Mode: Letter Grading

ENGL 514W - British Literature III: Revolts, Renewals, Migrations
Credits: 4
Encounter the Romantic fantasies of John Keats's nature poetry and Mary Shelley's Frankenstein, the Victorian novels that brought us Jane Eyre, Ebenezer Scrooge and Mr. Hyde, the experiments of Modernists like Virginia Woolf and James Joyce, and Postmodern transformations by a shifting cast of contemporaries. We'll read these works in the context of imperial expansion and contraction, the crises of world wars, and the civil rights and independence struggles of the 20th and 21st centuries.
Attributes: Humanities(Disc); Writing Intensive Course
Equivalent(s): ENGL 514, ENGL 514H
Grade Mode: Letter Grading

ENGL 516W - American Literature II Money, Migration, and Modernity: Huck Finn to Beloved
Credits: 4
Students will discuss novels, plays, poems, and essays that address the difficult issues of national rebuilding, the temptations of a new consumer culture, the devastations of numerous wars fought overseas, and encounters with European, Jewish, Latin American, and Asian immigrants. Whether comparing nineteenth-century Huckleberry Finn with twentieth-century Beloved or making sense of modern and postmodern literary playfulness, students will become thoughtful readers and writers.
Attributes: Humanities(Disc); Writing Intensive Course
Equivalent(s): ENGL 516, ENGL 516H
Grade Mode: Letter Grading

ENGL 518W - Bible as Literature
Credits: 4
Have you ever wanted to read the Bible to gain a better understanding of history, religion, and the arts? Do you want to be able to discuss current religious and political issues in a Biblically informed way? Or maybe you just want bragging rights. Approaching the Bible as a literary work, this course investigates the intense and complicated emotional relationship between God and humanity. For people of faith, some faith, or no faith.
Attributes: Humanities(Disc); Writing Intensive Course
Equivalent(s): ENGL 518, ENGL 518H
Grade Mode: Letter Grading

ENGL 520 - Dystopian and Post-Apocalyptic Fiction
Credits: 4
What's behind the explosion of the dystopian and post-apocalyptic subgenres in the past decade? How do these seer-like representations of the future revisit older narrative traditions? We will discover why these prophetic forms--straddling the realms of science, politics, literature, and psychology--are at the forefront of the popular imagination. Assignments include blog posts, an op-ed, an imitative style exercise, and participation in online group chats from which you have a wide selection of times.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

ENGL 526 - Introduction to Fiction Writing
Credits: 4
Writing fiction asks us to say: who am I? What's happening in the world around me? Awakening to the story in your life, and thus to your own imagination, will change your life. Repeatedly, we see fiction writers find their power as creative people. You might become the head of a major corporation! You might just write a great novel or short story. Or just be happier. Join us: write stories, change your life.
Attributes: FinePerformingArts(Discovery); Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 527 - Introduction to Poetry Writing
Credits: 4
Writing poetry is training for life - its practice deepens both the liveliness and rigor of the mind. This course is run in a workshop/discussion format - it uses innovative exercises, guided prompts, language games, and readings that teach the basics of craft, while showing you how to think like a writer, opening up to the pleasures and surprises of the creative process. No prior experience necessary.
Attributes: FinePerformingArts(Discovery); Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 533 - Introduction to Film Studies
Credits: 4
A survey of the international development of the motion picture from the silent period to the present, emphasizing film's narrative practices. Introduces students to the study of the art, history, technology, economics, and theory of cinema. Films and film makers of various nations, periods, movements, and genres examined.
Attributes: Humanities(Disc)
Equivalent(s): ENGL 533H, ENGL 533W
Grade Mode: Letter Grading

ENGL 534 - 21st Century Journalism: How the News Works
Credits: 4
This class explores ways new technology, including social media, has affected the practice of journalism, and examines journalism past and present. Students discuss libel law, ethics and how to define plagiarism in the digital age. This survey is meant not only to lay a foundation for prospective journalists, but also to provide a broad understanding of the news media for those interested in how the news works.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

ENGL 550 - Introduction to the Literature and Culture of Race
Credits: 4
This course introduces students to readings across the field of ethnic literature and culture in order to form their capacity to speak and think critically about race relations in America. Readings will include those in race theory, racial construction and authenticity, histories of raced subjects in America, the rise of ethnic studies, white ignorance and whiteness studies, the intersectionality of race with gender, sexual orientation, economic class, religion, and faith. Includes Asian American, African American, Native, and Latino/a literature.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 555 - Science Fiction
Credits: 4
This course examines stories, novels, and film from the popular genre of science fiction. A variety of literary critical approaches are deployed to discuss a number of key authors and texts from the nineteenth century to the present.
Attributes: Humanities(Disc)
Equivalent(s): ENGL 555H
Grade Mode: Letter Grading

ENGL 560 - Introduction to Latinx Literature and Culture
Credits: 4
This course introduces students to the field of Latinx literature and culture in order to develop the ability to speak and think critically about race relations in the USA. Course readings will be drawn from texts produced primarily in English by individuals of Latin American descent. Readings may include immigration and borderlands discourse, art, music, television and film, histories of Latinx subjects in America, and the intersectionality of race with gender, sexual orientation, economic class and religion.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

ENGL 565 - Literary Dublin: Short-Term Study Abroad
Credits: 4
In this short-term study abroad experience, students will gain an appreciation of Ireland's many challenges of self- and other identity related to its location, conquest, colonization, emigration, religions, and recent global immigration. Contemporary course selections reference people (including Irish Americans) and events brought to life on site in Dublin. The course includes UNH guest speakers from English, history, and anthropology; Dublin -based speakers when available. Offers Irish American students research into their genealogy. Students must have a 3.25 GPA and 32 credits.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading
Special Fee: Yes

ENGL 575 - Sex and Sensibility: The Rise of Chick Lit
Credits: 4
This course examines the courtship novel, with an emphasis on female protagonists. How have various writers addressed the institution of marriage and long-term commitment, and the role finances play in partner choice? We'll start with the novels of Jane Austen and move to contemporary "chick lit", the latest incarnation of the romantic quest narrative, in order to understand this genre's continuing popularity. Assignments include blogs, online chats, research essays, and creative writing opportunities.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

ENGL 581 - Reading the Postcolonial Experience
Credits: 4
Modern South Asia and Africa have been shaped by their history of colonization. What is it like to live in places once dominated by foreigners, then reshaped by nationalisms and various injustices intensified by globalization? In this course, we'll read literary depictions that illuminate the lives, dreams, joys, hates, and failures of individuals and groups in these places, exploring both ordinary life and extraordinary experiences created by dispossession, political tyranny, civil war, and environmental trauma.
Attributes: World Cultures(Discovery); Writing Intensive Course
Equivalent(s): ENGL 581H
Grade Mode: Letter Grading

ENGL 585 - Introduction to Women in Literature
Credits: 4
The goal of this course is to examine women's roles in literary traditions, including women as authors and women as characters. We interrogate categories of sex, gender, and sexuality as they intersect with other categories of identity including race, class, and nation. Specific topics differ each semester according to the individual instructor. Recent semesters have included "Jewish Women Writers" and "Female Authors of the Mystery Novel". May be repeated for credit, barring duplication of topic.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ENGL 585H, ENGL 585R
Grade Mode: Letter Grading

ENGL 595 - Literary Topics
Credits: 4
Investigate in depth a literary topic of particular interest, in a course specially designed for both majors and non-majors. Themes vary from semester to semester--recent topics include the contemporary short story, Irish literature, animals in literature, and the literature of the Vietnam War. See the English Department for details of current offerings. May be repeated for credit, barring duplication of topic.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ENGL 595H, ENGL 595W
Grade Mode: Letter Grading

ENGL 602 - Advanced Professional and Technical Writing
Credits: 4
An advanced writing course focusing on writing in a global and technological workplace. In addition to fluency in the documents of the workplace, students focus on visual rhetoric in a technological environment through web design and usability while studying the issues of globalism, ethics, and the environment that affect all professional writing today. May be repeated with approval of instructor.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 603 - Phonetics
Credits: 4
This course introduces students to the study of the physical properties of speech sounds, including the transcription of English and other languages using the International Phonetics Alphabet, basic anatomy and physiology of the vocal tract, and the acoustic properties of vowels and consonants. Additional topics to be covered include phonetic variation and change, and the perception of speech sounds.
Prerequisite(s): LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-.
Equivalent(s): LING 603
Grade Mode: Letter Grading

ENGL 604 - Phonology
Credits: 4
This course introduces students to the study of phonology, or the mental organization of speech sounds. Topics covered include phonological typology, the concept of phonemes and mental representations of sounds, distinctive features and rule-based phonology, and a basic introduction to Optimality Theory.
Prerequisite(s): LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-.
Equivalent(s): LING 604
Grade Mode: Letter Grading

ENGL 605 - Intermediate Linguistic Analysis
Credits: 4
Introduces analysis methods and problem solving in phonology, morphology, and syntax using data from many languages. Emphasis will be both practical (learning how to describe the grammar and sound system of a language) and theoretical (understanding languages' behavior).
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D-.
Equivalent(s): LING 605
Grade Mode: Letter Grading

ENGL 606 - Languages of the World
Credits: 4
A survey of the languages of the world from genetic, areal, and typological perspectives. Students learn about the geographic and demographic distribution of language families and language isolates, as well as about structural characteristics of languages, language families and language areas. Additional topics include language endangerment and the question of linguistic universals. Students work collaboratively on a project investigating a particular language family, giving in class presentations and writing up a final project report. Some prior knowledge of phonetics, phonology, morphology, and syntax is necessary.
Prerequisite(s): ENGL 605 with a minimum grade of D- or LING 605 with a minimum grade of D- or ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D-.
Equivalent(s): LING 606
Grade Mode: Letter Grading

ENGL 607 - Syntax
Credits: 4
In this course, students explore the knowledge of sentence structure in an attempt to build a basic theoretical model of grammar. Students look at what we know when we know how to form phrases, sentences, and various grammatical constructions. In addition, students take an in-depth look at relationships between different elements within sentences and how best to formally account for these things. The course approaches all of this from a Chomskian/Generativist perspective in particular, although other frameworks will be discussed.
Prerequisite(s): LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-.
Equivalent(s): LING 607
Grade Mode: Letter Grading

ENGL 608 - Semantics
Credits: 4
In this course we explore meaning in language in-depth and from many different angles. First we discuss the nature of meaning and the various levels we must describe to move towards a more complete understanding. Along the way we examine meaning in words and how these meanings are stored, related and represented both in our knowledge and in the mind/brain. From there we will spend a significant amount of time uncovering the meanings of sentences by looking at sentential meaning as a function of the sum of its parts.
Prerequisite(s): LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-.
Equivalent(s): LING 608
Grade Mode: Letter Grading

ENGL 610W - Digital Humanities
Credits: 4
Digital methods can greatly intensify our understanding of literary works, non-fiction writing, film and many other modes of expression in the humanities. This course introduces students to the methods of thought, research and argumentation that digital technology makes possible. These may include identifying quantifiable language patterns, working with archival documents, mapping locations in written works, illuminating historical works, creating digital visualizations of texts, or working with translation tools and concordances.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 616A - Studies in Film/Genre
Credits: 4
Advanced, focused study of the narrative, dramatic, and poetic practices of cinema, within one of four possible subject areas: A) Genre; B) Authorship; C) Culture and Ideology; D) Narrative and Style. Precise issues and methods may vary, ranging from general and specific considerations of how a given subject area involves film theory, criticism, and history, to its use in diverse analyses of selected national cinemas, periods, movements, and filmmakers. May be repeated for credit barring duplication of topic. Barring duplication of material taken for credit in CMN 650, course may be repeated for credit. Detailed course descriptions available in the English department office.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): AMST 605, ENGL 616
Grade Mode: Letter Grading

ENGL 616B - Studies in Film/Authorship
Credits: 4
Advanced, focused study of the narrative, dramatic, and poetic practices of cinema, within one of four possible subject areas: A) Genre; B) Authorship; C) Culture and Ideology; D) Narrative and Style. Precise issues and methods may vary, ranging from general and specific considerations of how a given subject area involves film theory, criticism, and history, to its use in diverse analyses of selected national cinemas, periods, movements, and filmmakers. May be repeated for credit barring duplication of topic. Barring duplication of material taken for credit in CMN 650, course may be repeated for credit. Detailed course descriptions available in the English department office.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): AMST 605, ENGL 616
Grade Mode: Letter Grading

ENGL 616C - Studies in Film/Culture and Ideology
Credits: 4
Advanced, focused study of the narrative, dramatic, and poetic practices of cinema, within one of four possible subject areas: A) Genre; B) Authorship; C) Culture and Ideology; D) Narrative and Style. Precise issues and methods may vary, ranging from general and specific considerations of how a given subject area involves film theory, criticism, and history, to its use in diverse analyses of selected national cinemas, periods, movements, and filmmakers. May be repeated for credit barring duplication of topic. Barring duplication of material taken for credit in CMN 650, course may be repeated for credit. Detailed course descriptions available in the English department office.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): AMST 605, ENGL 616
Grade Mode: Letter Grading

ENGL 616D - Studies in Film/Narrative and Style
Credits: 4
Advanced, focused study of the narrative, dramatic, and poetic practices of cinema, within one of four possible subject areas: A) Genre; B) Authorship; C) Culture and Ideology; D) Narrative and Style. Precise issues and methods may vary, ranging from general and specific considerations of how a given subject area involves film theory, criticism, and history, to its use in diverse analyses of selected national cinemas, periods, movements, and filmmakers. May be repeated for credit barring duplication of topic. Barring duplication of material taken for credit in CMN 650, course may be repeated for credit. Detailed course descriptions available in the English department office.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): AMST 605, ENGL 616
Grade Mode: Letter Grading

ENGL 618 - Film Theory
Credits: 4
Examines basic theories of film and their relationship to the practice of close analysis of film. Theories are meant to provide students with a vocabulary for critical analysis and stress the many ways of seeing film.
Grade Mode: Letter Grading

ENGL 620 - English Major Internship
Credits: 1-4
Open to all English majors. Internships allow students to use skills learned in the major in a supervised work setting. In addition to the job experience, the English major internship requires research and writing assignments overseen by a faculty sponsor. These supplementary assignments must be outlined in a written proposal describing the work involved in the internship and how it relates to the student's academic training. Registration requires permission from the employer, faculty sponsor, major advisor, and department chairperson. The employer must be an established organization approved by Career Services. This course does not count toward the English major or substitute for English 720, the Journalism Internship.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

ENGL 621 - Newswriting
Credits: 4
Students get a strong journalistic foundation with hands-on experience reporting and writing compelling news stories for print and digital platforms. Skills taught include finding news stories and tracking down sources; conducting interviews and verifying facts; and drafting and revising stories. ENGL 621 may be taken more than once for credit with the approval of the Journalism Program Director. Students must fill out a Permission to Repeat an English Course For Credit form, available in the department office.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 623 - Creative Nonfiction
Credits: 4
Intensive writing course emphasizing the blend of basic elements that constitute creative nonfiction: research, observation, and personal experience. Also readings and discussion of some of the best published creative nonfiction. Students must fill out a Permission to Repeat an English Course For Credit form, available in the department office.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 625 - Intermediate Fiction Writing Workshop
Credits: 4
Students continue to explore the aspects of fiction writing. Through short exercises students learn to create visual scenes, integrate exposition with dramatic scene, and construct convincing characters in believable situations. We'll continue to explore the basic elements of what makes a short story, such as point of view, dialogue, dramatization, voice, meaning, language. Students write short stories and significantly revise them. Through discussion of student writing in a workshop format, as well as reading and responding to short stories by published authors, we'll address the questions: What is a short story? How do we create a world in which the reader is fully involved? Where does the story evoke emotion or meaning? ENGL 625 may be taken more than once for credit, recommended with two different instructors. Students must fill out a Permission to Repeat an English Course For Credit form, available in the department office.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 625A - Intermediate Fiction Writing Workshop: Screenwriting
Credits: 4
In this course, intermediate creative writers will learn the craft of writing scripts for film and television. Students will continue to explore the elements of effective storytelling by writing and significantly revising loglines, outlines, and complete short screenplays. The course will combine in-depth analysis of classic and contemporary screenplays (including shorts, teleplays, and feature-length films) with lectures, writing exercises, and peer workshops. Topics will include dramatic structure, professional formatting and planning, and how to develop vividly compelling characters, scenes, conflict and dialogue. The aim of the course will not be to simply reinforce existing narrative principles but rather to test the validity of existing conventions. Throughout we will address the questions: What makes a story relevant, moving, thrilling, or meaningful? Why does this story need to be told visually? What makes a great script great? ENGL 625A may be taken more than once for credit, recommended with two different instructors. Students must fill out a Permission to Repeat an English Course For Credit form, available in the department office.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 627 - Intermediate Poetry Writing Workshop
Credits: 4
Workshop discussion of poems written by students, with focus on more complex techniques and forms. Individual conferences with instructor. ENGL 627 may be taken more than once for credit, recommended with two different instructors. Students must fill out a Permission to Repeat an English Course For Credit form, available in the department office.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 631 - Digital Reporting
Credits: 4
This course immerses students in the digital news landscape and teaches them to report across multiple platforms. Students learn reporting tools and strategies for producing dynamic digital journalism.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 621 with a minimum grade of B.
Equivalent(s): ENGL 531
Grade Mode: Letter Grading

ENGL 650R - I Hear America Singing: Studying American Literature and Culture
Credits: 4
Examine unique themes, theories, and works of art in American Studies that are not offered on a regular basis. This course explores the intersection of literature and medicine; as well as comics and graphic narrative; music and social protest, photography and nonfiction; the literature of Stonewall. Learn how to approach the proposed subject, its specialized vocabulary, history and politics in its pages, and its value for the contemporary moment. May be repeated for credit, barring duplication of topic.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): AMST 603, ENGL 650
Grade Mode: Letter Grading

ENGL 655 - Reading in all Directions: Comics and Graphic Narrative
Credits: 4
"Reading happens in all directions," says Hilary Chute about the study of comics and graphic narrative. In this course, students will learn to read images and texts from all directions: up, down, horizontally, vertically, across panels and jacket flaps, in seriality and on the internet. Comics' ability to represent both trauma and the trivial takes students from newspaper funnies to the Holocaust, from superheroes in mid-century floppies to Underground comix and current autobiographical comics, comics journalism, comics history, and fiction.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 657 - Shakespeare
Credits: 4
An introduction to the main periods of Shakespeare's playwriting career, addressing representative works from each of the genres in which he wrote (tragedy, comedy, history, romance). We will discuss such matters as a Renaissance theater architecture and performance conventions, Shakespeare's poetic language, the representation of women, commoners and minorities on stage, royal power and court politics, love, sex, religion, and revenge. Live and filmed performances will be included as available.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Equivalent(s): ENGL 657H
Grade Mode: Letter Grading

ENGL 690 - African American Literature
Credits: 4
Whether in poetry and prose, or fiction and nonfiction, what issues have occupied African American writers and readers? What joy do these writers and readers derive from the written word and oral tradition? Motivated by these questions, this class traces the origins of an African American literary tradition in British North American; charts the circulation of ideas about democracy and citizenship in the nineteenth-century United States; and maps ongoing debates about race and representation today.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 693 - Special Topics in Literature
Credits: 4
A) Old English Literature, B) Medieval Literature, C) 16th Century, D) 17th Century, E) 18th Century, F) English Romantic Period, G) Victorian Period, H) 20th Century, I) Drama, J) Novel, K) Poetry, L) Nonfiction, M) American Literature, N) A Literary Problem, O) Literature of the Renaissance, R) Race and Racial Theories. The precise topics and methods of each section vary. Barring duplication of subject, course may be repeated for credit. For details, see course descriptions available in the English department. (Not offered every year.) Special fee on some topics.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to 2 times.
Grade Mode: Letter Grading
Special Fee: Yes

ENGL 693R - Special Topics in Literature
Credits: 4
A) Old English Literature, B) Medieval Literature, C) 16th Century, D) 17th Century, E) 18th Century, F) English Romantic Period, G) Victorian Period, H) 20th Century, I) Drama, J) Novel, K) Poetry, L) Nonfiction, M) American Literature, N) A Literary Problem, O) Literature of the Renaissance, R) Race and Racial Theories. The precise topics and methods of each section vary. Barring duplication of subject, course may be repeated for credit. For details, see course descriptions available in the English department. (Not offered every year). Special fee on some topics.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ENGL 693
Grade Mode: Letter Grading
Special Fee: Yes

ENGL 694 - Special Topics in Creative Writing
Credits: 4
Courses offered under this number feature a variety of topics having to do with creative writing. Barring duplication of subject, course may be repeated for credit. For details, see the course descriptions available in the English Department.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 701 - Advanced Fiction Writing Workshop
Credits: 4
Students come to this course with a firm grasp of all the elements of fiction, ready to write short stories that construct convincing characters in believable situations. In a workshop format, students give and receive critiques on classmates' work. Significant revisions of short stories and thorough discussions of work by published authors will round out the course as students continue to explore the art of writing the short story. Students are responsible for leading discussion of published stories. ENGL 701 may be taken more than once for credit, recommended with two different instructors.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 703T - Travel Writing
Credits: 4
A workshop devoted to reading and writing and writing narratives of place. Travel writing requires the author to research and reflect, exploring both the external--the place--and the internal--the author's experience. Students write multiple travel pieces and read widely essays of place by writers such as John Steinbeck, Joan Didion, Pico Iyer and Eliza Griswold.
Co-requisite: INCO 589
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 501 with a minimum grade of D- or ENGL 621 with a minimum grade of D- or ENGL 623 with a minimum grade of D-.
Equivalent(s): ENGL 703
Grade Mode: Letter Grading
Special Fee: Yes

ENGL 710 - Teaching Writing
Credits: 4
This course will introduce you both to the theories and practices of teaching writing in middle and high school at a time of increased accountability. The course is designed for students who are interested in exploring teaching as a possible career. In the course we will try out varied literacy activities and study teaching writing using a process approach. We discuss different approaches to planning instruction and various forms of writing assessment, including state-wide tests.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 711 - Editing
Credits: 4
Survey of newspaper and news website editing, covering topics ranging from grammar and style to headline writing to ethics.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 621 with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 712 - Multimedia Storytelling
Credits: 4
In this course, students explore the theory and practice of visual storytelling -- including composition, lighting, editing and more -- to produce short yet vibrant journalistic video documentaries. Students learn to shoot and edit audio and video. They explore narrative techniques and structure. They broaden their reportorial range, bringing visual sensitivity to storytelling.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 621 with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 714 - Critical Skills
Credits: 4
This course provides training in critical analysis of various texts (literature, film, and media). Criticism is often applied to the hot-button issues of the day. We ask questions like: How does gender shape the way we read? How to interpret texts in a globalized world? Does the truth matter? This course satisfies a post-1800 literature requirement for English Department majors; may be taken for elective credit by English Teaching Majors.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 419 with a minimum grade of D-.
Equivalent(s): ENGL 617
Grade Mode: Letter Grading

ENGL 715 - Teaching English as a Second Language: Theory and Methods
Credits: 4
A course on the linguistic, psychological, and sociological theories that inform our understanding of language acquisition and current best practices in the teaching of ESOL. Provides an overview of first and second language acquisition, bilingualism, learner individual differences (e.g., age, motivation, aptitude, learning strategies), and sociocultural contexts of ESL teaching and learning.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 716 - Curriculum, Materials and Assessment in English as a Second Language
Credits: 4
A hands-on approach to developing curriculum and course material for teaching English as a Second Language. Students work on lesson plan development (needs analysis, objective writing, task sequencing, assessment of proficiency and objective), conduct ESL classroom observations, and engage in teaching demonstrations.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 718 - Morphology
Credits: 4
Morphology is the study of word formation and the mental lexicon. This course explores processes of derivation, compounding and inflection that allow us to form new words. Students will become proficient in analyzing word formation processes in English and other languages, including deploying terminology used by morphologists. Students will learn and practice the conventions of "writing like a linguist".
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D-.
Equivalent(s): LING 718
Grade Mode: Letter Grading

ENGL 719 - Sociolinguistics Survey
Credits: 4
How language varies according to the characteristics of its speakers: age, sex, ethnicity, attitude, time, and class. Quantitative analysis methods; relationship to theoretical linguistics. Focus is on English, but some other languages are examined.
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D-.
Equivalent(s): LING 719
Grade Mode: Letter Grading

ENGL 720 - Journalism Internship
Credits: 1-16
Students intending to pursue careers in journalism spend a semester working full or part time, reporting and writing, editing or producing content for a news organization.
Prerequisite(s): ENGL 621 with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 721 - Advanced Reporting
Credits: 4
While the theme of this course is teaching students advanced techniques of writing and reporting, each semester the course is offered it focuses on different areas of journalism. One semester, students may learn multimedia reporting - storytelling across multiple platforms, including video and audio - and in other semesters the course may focus on sportswriting. Yet in others, students will develop their news reporting skills. The course may be taken multiple times for credit with the approval of the Journalism Program Director.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 621 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

ENGL 722 - Feature Writing
Credits: 4
An intermediate workshop that asks students to report in greater depth and experiment with different storytelling methods.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 621 with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 725 - Teaching Writing: Seminar in English Teaching
Credits: 4
In this course, students will learn to be effective teachers of writing and composition. Students will work to develop their own approaches to literacy instruction by examining and comparing philosophies of English teaching and learning. Students will discuss theoretical, pedagogical, and practical ideas for teaching writing; engage in writing and composition exercises; produce and practice instructional activities and assessments; and evaluate teaching approaches. Together, the secondary school English methods courses (ENGL 725/ENGL 810S and ENGL 726/ENGL 892S) integrate knowledge about the teaching of reading, writing/composing, speaking, listening, and viewing.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 725L - Seminar in English Teaching: Lab
Credits: 2
Classroom and research lab experiences give English Teaching majors enrolled in the Seminar in English Teaching opportunities to put their pedagogical and theoretical readings into practice and grow as teachers. This Lab should be taken simultaneously with ENGL 725. Students must have JR or SR status at the start of the course. Permission of instructor required.
Co-requisite: ENGL 725
Grade Mode: Credit/Fail Grading

ENGL 726 - Teaching Literature and Literacy: Seminar in English Teaching
Credits: 4
In this course, students will learn to be effective teachers of literacy and literature. Students will work to develop their own approaches to literacy instruction by examining and comparing philosophies of English teaching and learning. Students will discuss theoretical, pedagogical, and practical ideas for teaching literature and literacy; engage in writing and composition exercises; produce and practice instructional activities and assessments; and evaluate teaching approaches. Together, the secondary school English methods courses (ENG 725/ENGL 810S and ENGL 726/ENGL 892S) integrate knowledge about the teaching of reading, writing/composing, speaking, listening, and viewing.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 726L - Sem in English Teaching: Lab
Credits: 2
Classroom and research lab experiences give English Teaching majors enrolled in the Seminar in English Teaching opportunities to put their pedagogical and theoretical readings into practice and grow as teachers. This lab should be taken simultaneously with ENGL 726. Students must have JR or SR status at the start of the course. Permission of instructor required.
Co-requisite: ENGL 726
Grade Mode: Credit/Fail Grading

ENGL 727 - Issues in Second Language and Multilingual Literacy
Credits: 4
Study of various issues in second language and multilingual literacy theory, research, instruction and administration. Topics include, but are not limited to, the characteristics and needs of multilingual learners, L2 reading-writing interfaces, sociocultural influences on L2 literacy development, L2 vocabulary learning strategies, and literacy instruction and placement for emergent bilinguals.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 728 - Language and Gender
Credits: 4
This course will explore a variety of topics around the theme of language and gender, including the relationship between gender, language and power; the linguistic marking of gender; how people use language to construct and perform their gender; how gender intersects with other facets of identity, including sexuality and race and ethnicity.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D- or WS 401 with a minimum grade of D- or WS 405 with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 729 - Special Topics in Composition Studies
Credits: 4
Advanced course on a topic chosen by the instructor. Precise topics and methods of each section vary. Possible topics include alternative discourses and rhetorics, contrastive rhetoric, electronic discourse and digital rhetoric, women's rhetorics and feminist pedagogies, Montaigne and the essay tradition, theories of literacy, theories of persuasive writing, theories of transactional writing, and written discourse analysis. Barring duplication of subject, may be repeated for credit. For details see descriptions available in the English Department.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 736 - Environmental Theory
Credits: 4
Theoretical approaches to nature writing. Topics vary but may include eco-memoirs, environmental rhetoric, native peoples and the land, land and national identity, animals in literature, and environmental activist non-fiction. May be repeated for credit if topic differs.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 738 - Asian American Studies
Credits: 4
Are you captivated by the stories, histories and experiences of Asian Americans? Do you want to learn about their cultures, struggles, and accomplishments? This course examines the variety and complexity of Asian Americans through literature, poetry, film, essays, photography, music, and web-based presences. Specific course topics, as arranged by the instructor, include the Japanese American internment, the literature of popular culture of the Vietnam War, Asian American graphic narratives, transnational adoption, and food and culture.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 742 - American Literature, 1815-1865
Credits: 4
Antebellum writers tried to shape the nation through their texts, as they expressed the struggles over power and identity that led to the Civil War--and that continue to define U.S. discourses today. We encounter the genres--novels, oratory, poetry, appeals, slave narratives, essays, and nature writing--that authors used to grapple with slavery, social reform, environmental transformation, and aesthetics. Writers may include William Apess (Pequot), Margaret Fuller, Edgar Allan Poe, Frederick Douglass, and Emily Dickinson.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 751 - Medieval Romance
Credits: 4
This course provides an overview of one of the most unique genres of medieval literature: the romantic epic. From brave knights and marvelous wizards to cunning queens and hungry dragons, the literature of this class gives a fascinating introduction to the imaginative potential of the medieval world. This course also emphasizes how entertainment overlapped with ethical crisis, as romance reinforces social norms of gender and sex, race and religion.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 752 - History of the English Language
Credits: 4
Overview of the evolution of the English language from Proto-Indo-European until the present day. Topics to be covered include a general introduction to language change, the relationship between language and literary style, the impact of technology on language, and the state of English in the world today.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 756 - Chaucer
Credits: 4
Geoffrey Chaucer is one of the most famous poets in the English language - but why? This course offers students and overview of Chaucer's poetry, spending particular time on his masterpiece, "The Canterbury Tales". Sometimes tragic, sometimes bawdy, and almost always humorous, Chaucer's poetry offers a glimpse of a world long-lost, while simultaneously forcing us to ask hard questions about justice, love, and the nature of human creation.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 758 - Advanced Shakespeare
Credits: 4
This course offers an in-depth look at a few Shakespeare plays, which you'll study intensively through the lens of a single topic. Topics vary from semester to semester. Recent examples include Shakespeare on Screen, Shakespeare and Race, Shakespeare's History Plays, Unknown Shakespeare, and Shakespearean Tragedy. Live and filmed performances will be included as available.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ENGL 759 - Milton
Credits: 4
Readings include a wide selection of Milton's poetry and prose with a special focus on "Paradise Lost". Milton's writings contain arguments regarding free will, tyranny, and slavery that inform modern conceptions of civil liberty, republican government, and free speech. In the US Benjamin Franklin, Thomas Jefferson, John Adams and other early framers credit "Paradise Lost" as having shaped their ideas of religious and civil liberty in a democratic republic.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 773 - Literary Modernisms: Return, Revolt, Recycle
Credits: 4
This course focuses on modernist writers such as T.S. Eliot, who sought to revitalize modern culture by looking backward to the past; Virginia Woolf, who experimented with the form of the novel; and performance artist Kabe Wilson, who recycles texts of high modernism. We explore modernist literature in its geopolitical contexts with special attention to imperial expansion and contraction, the rise of fascism, world wars, and struggles for suffrage, and national belonging.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 775 - Modern Irish Literature: A Changing Landscape
Credits: 4
In this course we will explore Irish literature and culture from the Celtic Renaissance in the early twentieth century to the Celtic Tiger of the early twenty-first. Readings will trace Ireland's transformation from an inward-looking agricultural nation to one of the most globalized countries in the world. Recurring themes will include the status of the Church, changing gender roles, sectarian conflict, and Ireland's relation to the world.
Prerequisite(s): ENGL 401 with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 777 - The English Novel in the World
Credits: 4
Novels written in English from Asia and Africa during the mid-twentieth century to the present day. We will discuss shifts from realism to magical realism and back; domestic, historical and speculative fiction; narratives of the rise of new nations and nationalism; experiences of exile and migration; the 'global' city; transnational cultural exchanges and networks that dismantle assumed civilizational boundaries. Newer novels offer opportunities to understand how literary narratives grasp ecological destruction, animal extinction, and human responsibility.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 778 - Race and Gender in Film and Popular Culture
Credits: 4
This course explores representations of race and gender in American cinema and popular culture and features weekly readings in contemporary race and gender theories. Topics include the gaze; woman as object; the action hero and hyper-masculinity; hybridity; race/ethnicity and hypersexuality; the crisis of masculinity; and sexual orientation. This course is reading and Canvas intensive, requiring weekly writing assignments and papers.
Grade Mode: Letter Grading

ENGL 779 - Linguistic Field Methods
Credits: 4
Study of a non-Indo-European language by eliciting examples from an informant, rather than from written descriptions of the language. Students learn how to figure out the grammar of a language from raw data. (Not offered every semester).
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D- or ENGL 605 with a minimum grade of D- or LING 605 with a minimum grade of D-.
Equivalent(s): LING 779
Grade Mode: Letter Grading

ENGL 782 - Modern and Contemporary Drama
Credits: 4
An overview of the best writing for the modern stage. We'll survey developments in theater in the past 100 years, sampling such genres as absurdist drama, psychological gothic, "in yer face" theatre, theater that incorporates new media, and work by women, African-American, Latinx, gay and immigrant writers. We'll discuss the changing role of theater in society, identity politics onstage and off, and shock, sex and violence as dramatic techniques. Live and filmed performances as available.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 784 - English Novel of the 19th Century
Credits: 4
The highly popular novels of nineteenth-century Britain produced such memorable characters as Sherlock Holmes, Count Dracula, Alice in Wonderland, Frankenstein's monster, and Dr. Jekyll. The novel's literary engagements with science, love, and the city are entangled with cultural discourses on animals, monstrosity, supernaturalism, degeneration, empire, race, and crime. In this course, students will sample a set of novels that exemplify the distinct generic and thematic innovations of the period.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D-.
Grade Mode: Letter Grading

ENGL 787 - English Major Seminar
Credits: 4
This Capstone course offers you an opportunity to study a specialized topic in depth in a seminar format. Enrollment is limited to 15 so that you can take active part in discussion and work closely with the instructor on a research project. Topics vary from semester to semester. Recent topics include Tragedy, Comedy, American Women Poets, Medicine in Literature, and Feminist Print Culture. May be repeated for credit, barring duplication of topic. For details see semester specific course descriptions available in the English Department.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 419 with a minimum grade of B.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ENGL 787R
Grade Mode: Letter Grading

ENGL 788 - Senior Honors
Credits: 4
Open to senior English majors who, in the opinion of the department, have demonstrated the capacity to do superior work. An honors project consists of supervised research leading to a substantial thesis or writing of poetry or fiction portfolio. Required of students in the honors in major program. (Not offered every year.)
Attributes: Honors course; Writing Intensive Course
Grade Mode: Letter Grading

ENGL 789 - Special Topics in English Teaching
Credits: 4
Advanced theories and practices course on English Teaching. Topics such as A) Teaching Young Adult Literature, C) Teaching English in Diverse Contexts, D) Teaching Drama, N) Teaching Nonfiction, R) English Teachers as Researchers, and T) Alternate Literacies and Teaching Technologies. Barring duplication of subject, course may be repeated for credit. For details see course descriptions available in the English department.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 790 - Special Topics in Linguistics
Credits: 4
Advanced course on a topic chosen by the instructor. Inquire at the English department office for a full course description each time the course is offered. Topics such as word formation, dialectology, linguistic theory and language acquisition, history of linguistics, language and culture, cross-disciplinary studies relating to linguistics. Barring duplication of subject, may be repeated for credit.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): LING 790
Grade Mode: Letter Grading

ENGL 791 - English Grammar
Credits: 4
An introduction to the terminology and major concepts in English grammar. Covers descriptive vs. prescriptive grammar, parts of speech, phrase structure, clause types, and basic sentence patterns. Useful for pre-service teachers seeking to acquire the background knowledge needed to make informed decisions about teaching of English grammar.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 792 - Teaching Literature and Literacy
Credits: 4
This course introduces theories and practices of teaching literature and literacy, including teaching reading and writing as well as teaching literary analysis at the secondary level. Students also learn to plan lessons, choose texts, and create learning activities for speaking, listening, and viewing in grade five through twelve. The course is designed for students who are interested in teaching as a possible career.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ENGL 793 - Phonetics and Phonology
Credits: 4
The sound system of English and other languages as viewed from the standpoint of modern linguistic theory, including the following topics: the acoustic and articulatory properties of speech sounds, the phonemic repertories of particular languages, phonological derivations, and prosodic phenomena such as stress and intonation.
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D- or ENGL 605 with a minimum grade of D- or LING 605 with a minimum grade of D-.
Equivalent(s): LING 793
Grade Mode: Letter Grading

ENGL 794 - Syntax
Credits: 4
Relationship of grammar and meaning as viewed from the standpoint of modern linguistic theory. Emphasizes the syntax and semantics of English, with special attention to the construction of arguments for or against particular analyses.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D- or ENGL 605 with a minimum grade of D- or LING 605 with a minimum grade of D-.
Equivalent(s): LING 794
Grade Mode: Letter Grading

ENGL 795 - Independent Study
Credits: 1-4
Open to highly qualified juniors and seniors. To be elected only with permission of the department chairperson and of the supervising faculty member or members. Barring duplication of subject, may be repeated.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 796 - The Internship Experience
Credits: 4
Students work with their peers to establish a personal definition of professionalism in their respective fields; they will read, critically analyze, and discuss articles covering a wide variety of topics, including writing at work, intended audiences, navigating a difficult work environment or situation, and strategies for professional development. Class sessions in a discussion format, intended to be flexible and to directly support the changing needs of writing in the workplace. Students, along with their supervisors, will create their own learning objectives and evaluation tools. Students will write about their experiences at the end of term. Minimum GPA 3.0 required for registration.
Prerequisite(s): ENGL 419 with a minimum grade of D- and (ENGL 502 with a minimum grade of D- or ENGL 602 with a minimum grade of D-).
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ENGL 695
Grade Mode: Letter Grading

ENGL 797 - Special Studies in Literature
Credits: 4
A) Old English Literature, B) Medieval Literature, C) 16th Century, D) 17th Century, E) 18th Century, f) English Romantic Period, G) Victorian Period, H) 20th Century, I) Drama, J) Novel, K) Poetry, L) Non-fiction, M) American Literature, N) A Literary Problem, O) Literature of the Renaissance, R) Race and Racial Theories. The precise topics and methods of each section vary. Barring duplication of subject, may be repeated for credit. For details, see the course descriptions available in the English department.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

ENGL 797R - Special Studies in Literature (Race & Racial Theories)
Credits: 4
A) Old English Literature, B) Medieval Literature, C) 16th Century, D) 17th Century, E) 18th Century, F) English Romantic Period, G) Victorian Period, H) 20th Century, I) Drama, J) Novel, K) Poetry, L) Non-fiction, M) American Literature, N) A Literary Problem, O) Literature of the Renaissance, R) Race and Racial Theories. The precise topics and methods of each section vary. Barring duplication of subject, may be repeated for credit. For details, see the course descriptions available in the English department.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ENGL 797
Grade Mode: Letter Grading

English/Speakers of Other Languages (ESL)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ESL 421 - Intermediate Listening and Speaking
Credits: 2-8
Intensive English, with a focus on speaking and listening, for English language learners at an intermediate level. Students will expand their vocabulary and develop sufficient English proficiency to communicate with English speakers who have little experience with English language learners.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

ESL 431 - Advanced Listening and Speaking
Credits: 2-8
Intensive English, with a focus on speaking and listening, for English language learners at an advanced level. Students will develop an extensive vocabulary in English and sufficient English proficiency to function successfully in American university courses that do not rely heavily on language.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

Entrepreneurship (ENT) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ENT 500 - The Entrepreneurial Mindset
Credits: 4
This highly interactive course explores how entrepreneurs think and innovate. In the course, students may explore new paths to innovation and growth which includes understanding and incorporating the behaviors and thought processes unique to entrepreneurs. Students will incorporate entrepreneurial thinking and behavior into a process of a new venture or current positions, as intrapreneurs. The course will also provide a brief overview of tools that can be utilized to manage internal and external processes. Students may explore creative problem solving and, in teams, develop and test problem solutions using a "business model canvas" approach.
Attributes: Writing Intensive Course
Equivalent(s): ENT 500G
Grade Mode: Letter Grading

ENT 600 - Launching and Managing Entrepreneurial Ventures
Credits: 4
This course is designed for students interested in the steps required to start a new business venture. The focus will be on creating a new venture and covers in detail six key aspects related to the entrepreneurial process, including: introduction to lean entrepreneurship principles; business model design and assessment; legal issues in venture creation; new venture marketing and customer acquisition strategy; and new venture financial planning. Students may also learn all aspects of entrepreneurship, including: idea generation and business plan creation; forming a company; recruiting a team of key employees and advisors; developing a product/service; raising capital; business development / sales / marketing; board and investor relations; and fostering a strong business culture. Example assignments may include oral presentations, written new venture plans and discussions with classmates.
Prerequisite(s): ENT 500 with a minimum grade of D- or ENT 500G with a minimum grade of D-.
Equivalent(s): ENT 600G
Grade Mode: Letter Grading

ENT 611 - Entrepreneurial Marketing
Credits: 4
This course clarifies key marketing concepts, methods, and strategic issues relevant for start-up and early-stage entrepreneurs. Course topics may include but are not limited to identifying market opportunities, creating and screening new ideas, writing concepts, concept testing, new product forecasting, prototyping, and building a business case with assumptions about market entry strategy and launch marketing. The goal is to help students learn how to use state-of-the-art techniques to identify markets, develop new product ideas, measure customer benefits, and design profitable new products. This course is designed to help students develop a flexible way of thinking about marketing problems and strategies.
Prerequisite(s): MKT 510 with a minimum grade of D- or MKTG 514G with a minimum grade of D- or BUS 610 with a minimum grade of D-.
Equivalent(s): ENT 611G
Grade Mode: Letter Grading

ENT 703 - Entrepreneurial Finance
Credits: 4
This course studies the financial strategies needed to support a new venture. Students investigate sources of funding and analyze investment strategies unique to the start-up. Planning for the funding aspect of a new venture is critical and this course will address the alternative sources of funds for carrying out the mission of the venture. This would include: understanding financial institutions (financial bootstrapping, external financing, angel investors, venture capitalists, founders, and banks) that provide risk capital for such firms. An entrepreneur needs to understand how to identify a business opportunity as well as how to marshal resources (especially capital) to a business opportunity. Topics may include financial statements, pro forma statements, cost of capital, break-even, financial ratios, investor expectations, and exit strategies. Recommended: ENT 500 The Entrepreneurial Mindset.
Equivalent(s): ENT 603G
Grade Mode: Letter Grading

ENT 707 - Legalities and Ethics of Entrepreneurship
Credits: 4
This course will examine the legal and ethical issues and problems faced by entrepreneurs in their journey, specifically from conception of an idea, to the creation and operations of a company, to the launch of a product or service, and finally to the sale of the company or investment by venture capitalists and everything in between. Topics may include the legal, ethical, and regulatory frameworks of intellectual property (trade secrets, patents, trademarks, and copyright), business and corporate issues, business entity structure and formation, taxation, contracts, operations and personnel, and raising capital through traditional and alternative methods. Recommended: ENT 500 The Entrepreneurial Mindset.
Equivalent(s): ENT 607G
Grade Mode: Letter Grading

Environmental & Resource Economics (EREC)

Courses previously under the EREC subject prefix are now under the following subject prefix:

Natural Resources (NR)

Exchange (EXCH)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

EXCH 595 - Exchange
Credits: 0-18
For students enrolling in domestic study away/exchange experiences.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

Exercise Science (EXSC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

EXSC 520 - Contemporary Perspectives in Exercise Science
Credits: 4
This course is designed to introduce undergraduate students to the field of Exercise Science. Research studies, experiential learning and professional development will be used to explore the different aspects of Exercise Science including fitness, wellness, human performance, research and clinical exercise physiology. Students will discover the many ways exercise is used as a health and fitness intervention. Career options will be studied and evaluated giving students an informed exposure to potential areas of future.
Equivalent(s): KIN 520
Grade Mode: Letter Grading

EXSC 527 - Scientific Foundations of Health and Fitness
Credits: 4
Provides students with practical, scientific, entry-level information relative to physical conditioning, health, and wellness from childhood through adulthood. Students are given theoretical information that will be followed by practical, hands-on experiences offered through laboratories experiences.
Attributes: Biological Science(Discovery); Discovery Lab Course; Writing Intensive Course
Equivalent(s): KIN 527
Mutual Exclusion: No credit for students who have taken NUTR 506.
Grade Mode: Letter Grading
Special Fee: Yes

EXSC 607 - Biology of Aging
Credits: 4
Biological mechanisms of the aging process, with special emphasis on human aging; changes due to chronic disease.
Attributes: Biological Science(Discovery)
Equivalent(s): KIN 607
Grade Mode: Letter Grading

EXSC 620 - Physiology of Exercise
Credits: 4
Acute and chronic effects of exercise. Muscle physiology, respiration, cardiac function, circulation, energy metabolism, and application to training.
Prerequisite(s): BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-.
Equivalent(s): KIN 620
Grade Mode: Letter Grading

EXSC 621 - Exercise Laboratory Techniques
Credits: 4
Laboratory assessment of functional capacity, body composition, anaerobic power, anaerobic threshold, pulmonary function, blood pressure control, muscle strength, and temperature regulation. Field tests are used where appropriate. Extensive out-of-class time is required as each week a detailed lab report is submitted for grading.
Attributes: Writing Intensive Course
Prerequisite(s): EXSC 620 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

EXSC 649 - Junior Seminar in Exercise Science
Credits: 2
This is a seminar course for juniors enrolled in the Exercise Science Program and is designed to further prepare students for the off campus practicum. Topics to be covered include cover letter and resume preparation, relevant literature discussions, and professional workplace standards.
Prerequisite(s): EXSC 735 with a minimum grade of D- and EXSC 736 with a minimum grade of D-.
Grade Mode: Letter Grading

EXSC 650A - Internship in Exercise Science
Credits: 6
Individualized experiential training in an external (off-campus) exercise science setting (hospital, health & fitness club, business, physical therapy, or medical (physician assistant) offices, research laboratory offering programs of prevention, intervention, and/or rehabilitation. The internship requires 270 contact hours and is a full-time commitment (10 weeks at 27 hours per week) taken the summer following the junior academic year. Activities may include graded exercise testing, exercise prescription, and exercise leadership.
Prerequisite(s): EXSC 649 with a minimum grade of D-.
Grade Mode: Credit/Fail Grading

EXSC 651 - Senior Seminar in Exercise Science
Credits: 2
This course is a seminar for seniors in the Exercise Science program and is designed to disseminate the internship experience (EXSC650A: Internship in Exercise Science). Topics to be covered include but are not limited to: networking, professional development, career planning, and participation in an Internship symposium presentation.
Prerequisite(s): EXSC 649 with a minimum grade of D- or EXSC 650A with a minimum grade of D-.
Grade Mode: Letter Grading

EXSC 693 - Teaching Assistantship
Credits: 2
Students serve as teaching teaching assistants in assigned class activities. Assignments to be made by the class instructor may include teaching assistants' and administrative duties.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

EXSC 696 - Independent Study
Credits: 2-4
An advanced, individual scholarly project under the direct supervision of a faculty member.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

EXSC 696W - Independent Study
Credits: 2-4
An advanced, writing-intensive, individual scholarly project under the direct supervision of a faculty member. Student and Faculty Adviser will prepare a written proposal that outlines: the questions to be pursued, the methods of investigation, the student's qualifications to conduct the research, the nature of the finished written product (e.g. case study, position paper, extended lab report). This proposal must be approved by major faculty and the department chair prior to the student's registration for EXSC 696W. All EXSC 696W projects must include: Some forms of informal, ungraded writing such as a journal, reading summaries, draft chapters, or invention activities. Regular writing interaction between student and faculty adviser (i.e. at least weekly or biweekly), to include written feedback from the adviser. A finished product that is polished via revision. Faculty sponsors and students should consult the resources and guidelines of the UNH Writing Program.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): KIN 770W
Grade Mode: Letter Grading

EXSC 699H - Honors Project
Credits: 4
Project first involves tutorial sessions to introduce the student to the experimental design, after which a research question is developed. After an appropriate literature review, the student collects and analyzes data, forms conclusions, and prepares a written report on the findings.
Attributes: Honors course
Grade Mode: Letter Grading

EXSC 704 - Electrocardiography
Credits: 4
Designed to provide exposure to basic interpretation and identification of electrocardiograms (ECGs). Includes detailed heart anatomy, coronary circulation, cardiac conduction system, electrocardiogram development, and all aspects pertaining to normal and abnormal ECGs.
Prerequisite(s): BMS 508 with a minimum grade of D-.
Equivalent(s): KIN 704
Grade Mode: Letter Grading

EXSC 705 - Topics in Applied Physiology
Credits: 4
Advanced exercise physiology course dealing with topics both current and relevant to exercise science majors. Includes genetics, environmental influences, immune system, detraining and over-training, epidemiology, ergogenic acids, and the influence of age and gender.
Prerequisite(s): EXSC 620 with a minimum grade of D- and EXSC 621 with a minimum grade of D- and EXSC 736 with a minimum grade of D-.
Equivalent(s): KIN 705
Grade Mode: Letter Grading

EXSC 720 - Science and Practice of Strength Training
Credits: 4
Designed to provide students exposure to the knowledge and practical experience necessary for establishing strength development programs in a variety of populations, including healthy, athletic, and higher risk individuals. Program design, correct lifting techniques, physiological adaptations, and organization and administration of programs are highlighted. Includes fundamentals regarding the selection of programs and equipment, spotting techniques, as well as ways to assess strength and power in humans without expensive equipment.
Prerequisite(s): EXSC 620 with a minimum grade of D- and EXSC 621 with a minimum grade of D-.
Equivalent(s): KIN 720
Grade Mode: Letter Grading

EXSC 722 - Applied Biomechanics
Credits: 4
This course provides students with a background in the fundamental biomechanical principles that describe and govern human movement. Topics of the course include friction, linear and angular motion, tissue material properties, conservation of energy, work and power, fluid mechanics, stability and center of gravity, mechanics of injury, walking and running gait analysis. These topics are taught through the lens of modern biomechanical analyses including dynamometry, electromyography, accelerometry, and optical motion analysis.
Prerequisite(s): EXSC 620 with a minimum grade of D-.
Equivalent(s): KIN 722
Grade Mode: Letter Grading

EXSC 724 - Exercise Metabolism: Acute and Chronic Adaptations
Credits: 4
Overview of the metabolic processes that occur during exercise and metabolic changes that occur as a result of exercise training. Topics include glycogenolysis and glycolysis in muscle, cellular oxidation of pyruvate, lipid metabolism, metabolism of proteins and amino acids, neural and endocrine control of metabolism, and fatigue during muscular exercise.
Prerequisite(s): EXSC 621 with a minimum grade of D- and CHEM 404 with a minimum grade of D-.
Equivalent(s): KIN 724
Grade Mode: Letter Grading

EXSC 735 - Clinical Applications of Exercise Testing
Credits: 2
This course provides students with both the knowledge and practical experience necessary to assess health and physical fitness in apparently healthy populations. Emphasis is placed on developing competency in informed consent, prescreening procedures, and the administration of health and physical fitness-related tests.
Co-requisite: EXSC 736
Prerequisite(s): EXSC 621 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

EXSC 736 - Guidelines of Fitness and Graded Exercise Testing
Credits: 2
This course introduces students to the physiological foundations of health and physical fitness assessment. Students will explore evidence-based procedures put forth by the American College of Sports Medicine for preparticipation health screening, risk stratification, and the administration of standardized assessment of health and physical fitness related testing.
Co-requisite: EXSC 735
Prerequisite(s): EXSC 621 with a minimum grade of C.
Equivalent(s): KIN 736
Grade Mode: Letter Grading

EXSC 737 - Exercise Prescription and Leadership in Healthy and Special Populations
Credits: 4
Provides exposure to the knowledge and practical experience necessary for establishing exercise and health promotion programs in a variety of populations. Includes fundamentals regarding personal training and program selection, implementation and equipment, legal issues, and budget establishment. Strength training programs and special populations are highlighted.
Prerequisite(s): (EXSC 621 with a minimum grade of C or EXSC 735 with a minimum grade of C) and EXSC 736 with a minimum grade of C.
Equivalent(s): KIN 737
Grade Mode: Letter Grading
Special Fee: Yes

EXSC 794 - Cardiopulmonary Pathologies
Credits: 4
Lecture study of the anatomy, physiology, and pathophysiology of the cardiac, vascular, and pulmonary systems. Particular emphasis on the study of cardiovascular function in diseased and stressed states. Clinical assessment of the cardiopulmonary patient.
Prerequisite(s): EXSC 704 with a minimum grade of D-.
Equivalent(s): KIN 794
Grade Mode: Letter Grading

EXSC 795 - Practicum in Cardiac Rehabilitation
Credits: 2
Provides students with practical and theoretical experience in all aspects involving cardiac rehabilitation programs.
Prerequisite(s): EXSC 704 with a minimum grade of D-.
Equivalent(s): KIN 795
Grade Mode: Letter Grading

Finance (FIN)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

FIN 501 - Survey of Finance
Credits: 4
This course introduces students to the fundamentals of finance. It will be offered to non-business major students. Students will learn basic macroeconomic notions and financial concepts such as supply and demand, time value of money, and market risk, and will be able to analyze economic factors and growth, value future cash flows of a project, make capital budgeting decisions, understand risk and return trade-offs and determine the cost of capital.
Grade Mode: Letter Grading

FIN 608 - Real Estate Finance
Credits: 4
This course provides an introduction to residential and commercial real estate. Topics include market analysis, cash flows, debt and equity financing, valuation, and real estate investment trusts. Case studies, projects, and real world applications of the concepts learned are significant components of the course.
Prerequisite(s): ADMN 570 with a minimum grade of C- or FIN 501 with a minimum grade of C- or HMGT 655 with a minimum grade of C-.
Equivalent(s): ACFI 708, FIN 708
Grade Mode: Letter Grading

FIN 620 - Topics in Finance I
Credits: 4
Special topics, vary by semester.
Prerequisite(s): ADMN 570 with a minimum grade of D- or FIN 501 with a minimum grade of D- or HMGT 655 with a minimum grade of D-.
Grade Mode: Letter Grading

FIN 650 - Wildcat Investment Fund
Credits: 2
Wildcat Investment.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

FIN 695 - Real Estate Internship
Credits: 4
This course provides an experiential learning opportunity to students who are considering developing a career in real estate industry. It is the advanced-level follow-up elective course of FIN 608 (Real Estate Finance) and CEP 672 (Fundamentals of Real Estate). It is not a traditional lecture type course, but rather a semester-long or summer internship in a real estate company. The instructor is the Minor Program Coordinator and would coordinate with the Paul College Career and Professional Success (CaPS) team and real estate companies to allocate intern opportunities to students, oversee student progress and analyze performance feedback, and develop rubrics for credit/fail grading.
Prerequisite(s): ADMN 570 with a minimum grade of C- or FIN 501 with a minimum grade of C- or HMGT 655 with a minimum grade of C-.
Grade Mode: Credit/Fail Grading

FIN 701 - Financial Policy
Credits: 4
Development of analytical tools and practical skills for recognizing and solving complex problems of business finance. Working-capital management, capital budgeting, cost of capital, capital structure, and dividend policy.
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Equivalent(s): ACFI 701
Grade Mode: Letter Grading

FIN 702 - Investments Analysis
Credits: 4
Security valuation, efficient markets, portfolio management, options, and alternative investments. Computer research topics.
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Equivalent(s): ACFI 702
Grade Mode: Letter Grading

FIN 703 - International Financial Management
Credits: 4
An exploration of financial management of firms operating in a global environment. Topics include foreign exchange markets, translation, transaction, and operating risk exposures, risk exposure management, sourcing capital globally, the financing of international trade, multinational tax management, and derivatives used to mitigate international exposure. Students also engage in a country specific analysis that incorporates the 2030 UN development and sustainability goals framework.
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Equivalent(s): ACFI 703
Grade Mode: Letter Grading

FIN 704 - Derivatives Securities and Markets
Credits: 4
Derivative assets and markets, and their role in business decision-making and portfolio management. Emphasis on practical and theoretical aspects of heading and speculating using futures and options for both commodities and financial assets, including their market mechanics.
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Equivalent(s): ACFI 704
Grade Mode: Letter Grading

FIN 705 - Financial Institutions
Credits: 4
Examination of financial institutions, financial instruments and financial markets. Emphasis on how commercial banks create value, the influences of the Federal Reserve and its monetary policies, and the workings of markets such as money markets, bond markets and mortgage markets. Throughout the course, the 2008 global financial crisis is central to the discussion. The course helps student develop knowledge and skills needed to start a career in finance industry.
Attributes: Writing Intensive Course
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Equivalent(s): ACFI 705
Grade Mode: Letter Grading

FIN 706 - Financial Modeling and Analytics
Credits: 4
The main objective of the course is to bridge the gap between theory and practice by using software applications and real-world data to solve a variety of financial problems. The course is very 'hands-on' and is expected to help students develop skills that are useful in a variety of jobs in finance, accounting, insurance, and real estate.
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Equivalent(s): ACFI 706
Grade Mode: Letter Grading

FIN 707 - Equity Analysis and Firm Valuation
Credits: 4
This course is intended to provide practical tools for analyzing and valuing a company's equity. Primarily an applications course, it covers several valuation models such as market multiples and free cash flow models, and focuses on the implementation of finance theories to valuation problems.
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Equivalent(s): ACFI 707
Grade Mode: Letter Grading

FIN 709 - Fixed Income Analysis and Valuation
Credits: 4
This course is a rigorous and analytical study of a wide range of topics in the fixed income arena. It focuses on securities (mainly bonds), and things that can look like securities (mainly loans) that promise an ongoing and consistent cash flow (hence: "fixed income"). The valuations of these things are influenced by interest rates and credit risk. The course is focused on the concepts and tools that are important to practitioners and investors who want to use these securities, whether as issuer or as investor. It includes a study of the markets in which these securities trade.
Prerequisite(s): (ADMN 570 with a minimum grade of C- or HMGT 655 with a minimum grade of C-) and FIN 702 with a minimum grade of C-.
Equivalent(s): ACFI 709
Grade Mode: Letter Grading

FIN 710 - Big Data in Finance
Credits: 4
This course serves as an introduction to many aspects of big data utilization, specifically as it applies to finance. Topics typically include high frequency trading, stock market anomalies, data management, fintech innovations, and safety and ethics when working with big data. Programming languages common to finance, such as Stata, SAS, and Python, are learned and used to analyze and manipulate data.
Prerequisite(s): FIN 702 (may be taken concurrently) with a minimum grade of C-.
Equivalent(s): ACFI 710
Grade Mode: Letter Grading

FIN 711 - Investment Banking
Credits: 4
This course explores several areas of investment banking. Investment bankers play a critical role in financial markets. Among their many roles, they provide advisory services to firms, help raise capital, and assist with complex financial transactions such as mergers and acquisitions. Course topics typically include company strategy, valuation, initial public offerings (IPOs), leveraged buyouts (LBOs), and mergers and acquisitions (M&A). Students cannot earn credit for the course after taking FIN 720 as Investment Banking.
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Grade Mode: Letter Grading

FIN 720 - Topics in Finance II
Credits: 4
Special topics, vary by semester.
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

FIN 720W - Topics in Finance II
Credits: 4
Special topics, vary by semester.
Attributes: Writing Intensive Course
Prerequisite(s): ADMN 570 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

FIN 725 - Independent Studies in Finance
Credits: 1-4
Student-designed individual research projects, approved by a faculty sponsor. Paper required. Course credits vary according to the nature of the project, to be determined by the faculty sponsor. For juniors and seniors in high standing; by permission.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

FIN 799H - Honors Thesis in Finance
Credits: 4-8
Supervised research leading to the completion of an honors thesis or project in finance; required for graduation from the honors program in administration for students in the finance option. Permission of director of undergraduate programs and Accounting and Finance department chair.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Mutual Exclusion: No credit for students who have taken ADMN 799.
Grade Mode: Letter Grading

Finance (FNC) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

FNC 611 - Money and Banking
Credits: 4
This course examines financial markets and financial intermediaries, and their role in creating and maintaining economic efficiency. It analyzes the performance of banks and other financial institutions and reviews the functions and measurements of money. It also examines and assesses the use of monetary policy tools, targets, and goals within the context of current economic conditions. Note: ECO 580 is recommended.
Prerequisite(s): ECO 470 with a minimum grade of D- or ECO 512G with a minimum grade of D- or ECN 411 with a minimum grade of D- or ECN 412 with a minimum grade of D-.
Equivalent(s): MGMT 611G
Grade Mode: Letter Grading

FNC 612 - Investment Principles
Credits: 4
This course provides the learner with a thorough overview of investments. Students will compare and contrast the major investment vehicles available today, including stocks, bonds, money markets, and mutual funds. Topics may include the analysis of investment vehicles (such as stocks, bonds, money markets, and mutual funds), consideration of risk and expected rates of return, time value of money applications, and the principles of asset allocation, risk tolerance, and diversification.
Prerequisite(s): (MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D-) and (MTH 504 with a minimum grade of D- or MATH 504G with a minimum grade of D- or MATH 420 with a minimum grade of D- or MATH 422 with a minimum grade of D- or MATH 425 with a minimum grade of D-).
Equivalent(s): MGMT 612G
Grade Mode: Letter Grading

FNC 665 - Financial Management
Credits: 4
A successful financial manager focuses on maximizing shareholder wealth, while also considering other stakeholders such as employees and communities. This course utilizes financial formulas, tables, and spreadsheets to focus on the financial functions of analysis, planning and decision-making, and control. Topics may include financial statement analysis and forecasting, working capital policy, cost of capital and capital budgeting techniques, interaction with financial markets, and time value of money techniques. NOTE: MTH 504 Statistics is recommended.
Prerequisite(s): (ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D- or MGMT 569G with a minimum grade of D- or MGMT 569 with a minimum grade of D-) and (ECO 470 with a minimum grade of D- or ECO 512G with a minimum grade of D-).
Equivalent(s): MGMT 613G
Mutual Exclusion: No credit for students who have taken BUS 601.
Grade Mode: Letter Grading

FNC 675 - Financial Modeling and Decision-Making
Credits: 4
This course prepares managers to develop real-world financial models and to interpret financial information for effective business decision making. It builds upon knowledge in accounting, finance, and economics and emphasizes the strategic application of such knowledge in the corporate setting. Students employ the tools of analysts to develop their understanding of how managers use financial data to guide decisions and to increase value. Topics may include capital budgeting, strategic investments, financial risk, and debt. NOTE: MTH 504 Statistics is recommended.
Prerequisite(s): (ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D- or MGMT 569G with a minimum grade of D- or MGMT 569 with a minimum grade of D- or BUS 532 with a minimum grade of D-) and (ECO 470 with a minimum grade of D- or ECO 512G with a minimum grade of D- or ECN 411 with a minimum grade of D- or ECN 412 with a minimum grade of D-).
Equivalent(s): MGMT 615G
Grade Mode: Letter Grading

Fire Service Administration (FSA) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

FSA 603 - Principles of Emergency Services
Credits: 4
This foundation course establishes baseline knowledge of emergency service history and practice common to all organizations. Students will extend their prior professional and academic experience into overviews of emergency service organizations, leadership and management strategies, service delivery, funding, and basic principles of community and responder risk reduction.
Grade Mode: Letter Grading

FSA 605 - Fire Service Ethics
Credits: 4
This course examines the basic principles of ethics as related to fire service operations and management with special attention given to current issues in the fire service.
Attributes: Writing Intensive Course
Equivalent(s): FSA 605G
Grade Mode: Letter Grading

FSA 610 - Community Risk Reduction for the Fire and Emergency Services
Credits: 4
This course provides a theoretical framework for the understanding of the ethical, sociological, organizational, political, and legal components of community risk reduction and a methodology for the development of a comprehensive community risk-reduction plan.
Equivalent(s): FSA 610G
Grade Mode: Letter Grading

FSA 635 - Political and Legal Foundations for Fire Protection
Credits: 4
This course examines the legal aspects of fire service, as well as the political and social impacts of legal issues. It includes a review of the American legal system and in-depth coverage of legal and political issues involving employment and personnel matters, administrative and operational matters, planning and code enforcement, and legislative and political processes with regard to the fire service.
Equivalent(s): FSA 615G
Grade Mode: Letter Grading

FSA 665 - Command and Control of Large-Scale Incidents
Credits: 4
This course addresses the knowledge and skills necessary to command the mitigation of large-scale emergency incidents that require resources beyond the initial alarm assignment. Students will have the opportunity to focus on strategic preparation for predictable events and create individualized command tools.
Equivalent(s): FSA 617G
Grade Mode: Letter Grading

FSA 685 - Fire Prevention Organization and Management
Credits: 4
This course addresses the knowledge, methods, and concepts for effective leadership of comprehensive fire prevention and risk-reduction programs.
Prerequisite(s): FSA 603 with a minimum grade of D- and FSA 605 with a minimum grade of D- and FSA 610 with a minimum grade of D- and FSA 635 with a minimum grade of D- and FSA 665 with a minimum grade of D-.
Equivalent(s): FSA 620G
Grade Mode: Letter Grading

FSA 710 - Personnel Management for the Fire Service
Credits: 4
This course examines relationships and issues in personnel administration and human resource development within the context of fire-related organizations. Topics include personnel management, organizational development, productivity, recruitment and selection, performance management systems, discipline, and collective bargaining.
Prerequisite(s): FSA 603 with a minimum grade of D- and FSA 605 with a minimum grade of D- and FSA 610 with a minimum grade of D- and FSA 635 with a minimum grade of D- and BEHS 665 with a minimum grade of D- and PADM 645 with a minimum grade of D-.
Equivalent(s): FSA 625G
Grade Mode: Letter Grading

FSA 740 - Applications of Fire Research
Credits: 4
This course examines the basic principles of research and methodology for analyzing current fire-related research. The course also provides a framework for conducting and evaluating independent research in the following areas: fire dynamics, fire test standards and codes, fire safety, fire modeling, structural fire safety, life safety, firefighter health and safety, automatic detection and suppression, transportation fire hazards, risk analysis and loss control, fire service applied research, and new trends in fire-related research.
Prerequisite(s): FSA 603 with a minimum grade of D- and FSA 605 with a minimum grade of D- and FSA 610 with a minimum grade of D- and FSA 635 with a minimum grade of D- and FSA 665 with a minimum grade of D- and FSA 685 with a minimum grade of D- and FSA 710 with a minimum grade of D- and FSA 760 with a minimum grade of D- and MTH 504 with a minimum grade of D-.
Equivalent(s): FSA 630G
Grade Mode: Letter Grading

FSA 760 - Fire and Emergency Services Administration
Credits: 4
This course is designed to build upon an existing base of knowledge about fire and emergency services with an in-depth survey of executive-level administrative and managerial topics. The course addresses the following skills that are necessary to manage and lead a fire and emergency services department through the challenges and changes of the 21st century: persuasion and influence, accountable budgeting, anticipation of challenges and the need for change, and using specific management tools for analyzing and solving problems. A central part of the course focuses on how the leadership of a fire and emergency services department develops internal and external cooperation to create a coordinated approach to achieving the department's mission.
Prerequisite(s): FSA 603 with a minimum grade of D- and FSA 605 with a minimum grade of D- and FSA 610 with a minimum grade of D- and FSA 635 with a minimum grade of D- and BEHS 665 with a minimum grade of D- and PADM 645 with a minimum grade of D-.
Equivalent(s): FSA 637G
Grade Mode: Letter Grading

FSA 797 - Integrative Capstone: Research Project in Fire Service Administration
Credits: 4
This capstone course in Fire Service Administration provides students the opportunity to integrate the knowledge and skills gained from other courses in the program and to demonstrate the ability to apply their knowledge to new subject matter and practical situations. In addition to preparing a professional portfolio, students will write, present, and defend an independent research project or study, to include analysis and synthesis integrating theory and practice to address a significant contemporary industry issue. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Prerequisite(s): FSA 603 with a minimum grade of D- and FSA 605 with a minimum grade of D- and FSA 610 with a minimum grade of D- and FSA 635 with a minimum grade of D- and BEHS 665 with a minimum grade of D- and PADM 645 with a minimum grade of D- and FSA 710 with a minimum grade of D- and FSA 760 with a minimum grade of D- and MTH 504 with a minimum grade of D-.
Equivalent(s): FSA 650G
Grade Mode: Letter Grading

Forest Technology (FORT)

Courses previously under the FORT subject prefix are now under the following subject prefix:

Natural Resources (NR)

French (FREN)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

FREN 401 - Elementary French I
Credits: 0 or 4
For students without previous knowledge of French, the course introduces students to French language and culture through speaking, listening, reading, writing, labs and films. Credit only for students who have had less than two years of French in secondary school. FREN 401 - FREN 402 taken together satisfies the foreign language requirement.
Grade Mode: Letter Grading

FREN 402 - Elementary French II
Credits: 0 or 4
See description for FREN 401. Cannot be taken separately except with permission of instructor.
Attributes: Foreign Language Requirement
Prerequisite(s): FREN 401 with a minimum grade of D-.
Grade Mode: Letter Grading

FREN 403 - Review of French
Credits: 4
Conducted in French. Course emphasizes the active use of French through speaking, listening, reading, writing, labs, and films while providing a review of basic grammar. Designed for those students whose study of French has been interrupted for a significant amount of time or who have had two or more years of high school French. FREN 403 does not satisfy the foreign language requirement.
Grade Mode: Letter Grading

FREN 503 - Intermediate French I
Credits: 4
Conducted in French. Review of grammar with emphasis on the development of reading, writing, speaking, and listening skills. With modules on culture tailored to the needs of students in STEM disciplines as well as in agriculture, business, hospitality, and health and human services (among others).
Attributes: World Cultures(Discovery); Foreign Language Requirement
Equivalent(s): FREN 503H, FREN 585
Grade Mode: Letter Grading

FREN 503W - Intermediate French I
Credits: 4
Conducted in French. Review of grammar with emphasis on the development of reading, writing, speaking, and listening skills, and on culture. Discussion in French of literary and cultural readings. Labs and films.
Attributes: World Cultures(Discovery); Writing Intensive Course; Foreign Language Requirement
Equivalent(s): FREN 503H, FREN 585
Grade Mode: Letter Grading

FREN 504 - Intermediate French II
Credits: 4
Conducted in French. Review of grammar with emphasis on the development of reading, writing, speaking, and listening skills, and on culture. Discussion in French of literary and cultural readings. Labs and films.
Attributes: World Cultures(Discovery); Writing Intensive Course; Foreign Language Requirement
Prerequisite(s): FREN 503 with a minimum grade of D-.
Equivalent(s): FREN 504H, FREN 586
Grade Mode: Letter Grading

FREN 525 - A Road Trip Through France: Baguette, Brie, Bordeaux, and Beyond
Credits: 4
What makes France France, and how did it evolve from a mostly agricultural to a modern society? Using films, essays, newspaper articles, and television this course examines major social, political, and gastronomic trends, events, debates and personalities that help shed light on contemporary French culture. Taught in English. May be repeated for credit barring duplication of materials. Offered in Spring.
Attributes: World Cultures(Discovery); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

FREN 595 - French Practicum
Credits: 2
Practical use of French language or cultural skills outside the classroom through special projects.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

FREN 631 - Advanced French: Reading and Writing
Credits: 4
This course is intended to refine students' ability to write in French through the study and practice of stylistic techniques, pertinent grammatical structures, and vocabulary used in contemporary written French. Working with a variety of texts, students become familiar with, and practice different forms of French rhetoric and styles in creative, argumentative, and analytical writings. Revision and rewriting are an integral part of the course, with students' own work providing a focus for in-class analysis and feedback. Offered during the fall semester. The course sequence FREN 631- FREN 632 may be taken in any order.
Attributes: World Cultures(Discovery); Writing Intensive Course; Foreign Language Requirement
Prerequisite(s): FREN 504 with a minimum grade of D-.
Grade Mode: Letter Grading

FREN 632 - Advanced French: Listening and Speaking
Credits: 4
This course is intended to refine students' ability to communicate in French, through the practice of debating and exchanging ideas, and a variety of pronunciation exercises. While reviewing and refining pertinent grammatical structures, students discuss current events and other material in class and on-line. Students also have the opportunity to actively practice their French during the weekly Zoom session with French students from Bordeaux. Offered during the spring semester. FREN 631 and FREN 632 may be taken in any order.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Prerequisite(s): FREN 504 with a minimum grade of D-.
Grade Mode: Letter Grading

FREN 651 - Love, War, and Power in French Literature
Credits: 4
Reading and rigorous oral and written analysis of French literary texts that illustrate a variety of genres, with particular attention paid to the issues of love, war, and power. May be taken before or after FREN 652.
Attributes: Humanities(Disc); Writing Intensive Course
Prerequisite(s): (FREN 631 (may be taken concurrently) with a minimum grade of D- and (FREN 632 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): FREN 651H
Grade Mode: Letter Grading

FREN 652 - Greatest Hits of French
Credits: 4
Reading and rigorous oral and written analysis of major French texts spanning 5 centuries of literature that illustrate a variety of genres, from the Chanson de Roland to Moliere's famous comedies. May be taken before or after FREN 651.
Attributes: Humanities(Disc); Writing Intensive Course
Prerequisite(s): FREN 631 (may be taken concurrently) with a minimum grade of D- and FREN 632 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): FREN 652H
Grade Mode: Letter Grading

FREN 676 - Topics in Francophone Culture
Credits: 4
Topics drawn from all aspects and periods of French civilization. May be repeated for credit barring duplication of materials. (Not offered every year.)
Attributes: Writing Intensive Course
Prerequisite(s): FREN 631 with a minimum grade of D- and FREN 632 with a minimum grade of D- and (FREN 651 with a minimum grade of D- or FREN 652 with a minimum grade of D-).
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): FREN 636
Grade Mode: Letter Grading

FREN 683 - Summer Study in Dijon (4 weeks)
Credits: 4
This course offers four weeks of intensive study of French language at the Centre International d'Etudes Francaises (CIEF) in Dijon, France. The prerequisite is at least elementary French or equivalent and depends on the student's level at the time of registration. Minimum GPA of 2.5 or better and permission. Special UNH fee. Student responsible for personal and travel expenses. Offered summers only.
Co-requisite: INCO 589
Attributes: Foreign Language Requirement
Grade Mode: Letter Grading
Special Fee: Yes

FREN 690 - Study Abroad in Dijon France
Credits: 0-16
Spring semester at the University of Burgundy (Dijon, France) for juniors. This one-semester program is open to majors who have completed with a B- or better FREN 631 and FREN 632 and FREN 651 or FREN 652, or equivalent. Non-majors need to speak with the program director to determine their eligibility. Non-credit orientation meetings are required during the fall semester prior to departure. The normal UNH requirements for studying abroad apply to this program. For further information, interested students should consult with the director in the French program.
Co-requisite: INCO 588
Attributes: World Cultures(Discovery)
Repeat Rule: May be repeated for a maximum of 32 credits.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

FREN 691 - Summer Study in Dijon (8 weeks)
Credits: 8
This course offers eight weeks of intensive study of French language at the Centre International d'Etudes Francaises (CIEF) in Dijon, France. The prerequisite is at least elementary French or equivalent and depends on the student's level at the time of registration. This course is also open to French majors who cannot fulfill their semester-long study abroad requirement for documented academic reasons. By petition only. Minimum GPA of 2.5 or better and permission. Special UNH fee. Student responsible for personal and travel expenses. Offered summers only.
Co-requisite: INCO 589
Grade Mode: Credit/Fail Grading
Special Fee: Yes

FREN 775 - Les Mis and their World
Credits: 4
Inspired by the very popular Victor Hugo's novel Les Miserables, this course examines 19th-century society and many issues of importance during that period: romantic and familial love, the nature of law and justice, morals and religious faith, as well as the architecture and urban design of Paris. It will also consider some of the adaptations for film, television, and the stage. May be repeated for credit, barring duplication of materials.
Attributes: Writing Intensive Course
Prerequisite(s): FREN 651 with a minimum grade of D- and FREN 652 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

FREN 795 - Special Studies in French Language and Literature
Credits: 1-4
Individual guided study of the work of a major author, a genre, or specific topics in literature. Training in bibliography and organization of material. (Not offered every year).
Grade Mode: Letter Grading

FREN 799 - Honors Senior Thesis
Credits: 2
Course leading to an honors senior thesis. Open only to seniors seeking honors in major whose individually designed research projects have been approved by the department and who have been assigned an adviser. Students must enroll for the spring semester. Students defend the resulting written thesis in an oral presentation before department members and others.
Attributes: Honors course
Grade Mode: Letter Grading

Genetics (GEN)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

GEN 604 - Principles of Genetics
Credits: 0 or 4
Chemical structure of genetic material, gene recombination, mutation, and chromosome mapping. Gene expression and regulation; recombinant DNA; evolutionary, quantitative, and population genetics. College math or statistics suggested.
Prerequisite(s): (((BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-)) or BMS 507 with a minimum grade of D-) and CHEM 403 with a minimum grade of D- and (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D-).
Equivalent(s): BIOL 604
Grade Mode: Letter Grading

GEN 606 - Genetics Lab
Credits: 4
Hands-on experience with some of the important model organisms used for research in genetics (fruit flies, bacteria, yeast, nematodes, and plants). Investigation of fundamental genetic concepts in the laboratory, experience with transmission and molecular genetic techniques, introduction to bioinformatics, analysis and interpretation of data.
Prerequisite(s): GEN 604 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

GEN 704 - Microbial Genetics and Genomics
Credits: 5
Study of heritable information in bacteria, their viruses, and model Eukaryotic microbes and fundamentals of bacterial genomics. Topics will include genetics of bacteriophages and bacteria; genome maintenance, mutation and evolution especially in reference to evolution of pathogens; mechanisms of gene transfer, gene regulation and adaptive responses; analysis of gene expression including by using the latest genomic tools; use of genomic data, including concepts and strategies of genome sequencing and annotation as well as metagenomics approaches for understanding diversity. Practical laboratory training in microbial genetics and genomics. Special emphasis on recombinant DNA techniques, nucleotide sequencing methods, and bioinformatics analysis to dissect and analyze gene function and genome structural features as practical tools for careers in biotechnology. Original research projects will include opportunities to work with bacteria, phages, and yeast.
Attributes: Writing Intensive Course
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D- and GEN 604 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

GEN 705 - Population Genetics
Credits: 3
Exploration of the forces (mutations, selection, random drift, inbreeding, assortative mating) affecting the frequency and distribution of genetic variation in natural populations. Quantifying the structure of populations. Methods of analysis for theoretical and practical applications.
Prerequisite(s): GEN 604 with a minimum grade of D- and BIOL 528 with a minimum grade of D-.
Equivalent(s): PBIO 705, ZOOL 665, ZOOL 705
Mutual Exclusion: No credit for students who have taken NR 664.
Grade Mode: Letter Grading

GEN 706 - Human Genetics
Credits: 4
Genetic basis of human traits and diseases including both traditional methods of diagnosis and contemporary molecular genetic approaches stemming from the human genome project. Case studies exemplify common practices in human genetic counseling and integrate the scientific basis of diagnosis with the special ethical implications of human genetic analysis.
Prerequisite(s): GEN 604 with a minimum grade of D-.
Equivalent(s): ANSC 706, BCHM 706
Grade Mode: Letter Grading

GEN 711 - Genomics and Bioinformatics
Credits: 0 or 4
Methods, applications, and implications of genomics--the analysis of whole genomes. Medical, ethical and legal implications of genomic data. Computer lab provides exposure and experience in a range of bioinformatics approaches used in genome analysis. Computer Lab.
Prerequisite(s): GEN 604 with a minimum grade of D-.
Equivalent(s): GEN 711W
Grade Mode: Letter Grading

GEN 711W - Genomics and Bioinformatics
Credits: 0 or 4
Methods, applications, and implications of genomics--the analysis of whole genomes. Microbial, plant and animal genomics are addressed, as well as medical, ethical and legal implications. The lab provides exposure and experience on a range of bioinformatics approaches--the computer applications used in genome analysis. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): GEN 604 with a minimum grade of D-.
Equivalent(s): BCHM 711, BCHM 715, GEN 711, MICR 711, MICR 715
Grade Mode: Letter Grading

GEN 712 - Programming for Bioinformatics
Credits: 5
Development of programming skills that enable life science students to ask fundamental biological questions that require computers to automate repetitive tasks and handle query results efficiently. Topics include: computer values of important parameters of biological sequence data; pattern search and motif discovery scripts; accessing, querying, manipulating, retrieving, parsing, analyzing, and saving data from local and remote databases. Computer Lab.
Prerequisite(s): GEN 604 with a minimum grade of D- and GEN 711 with a minimum grade of D-.
Grade Mode: Letter Grading

GEN 713 - Microbial Ecology and Evolution
Credits: 4
Evolutionary and ecological forces that generate the tremendous diversity of microbial life on Earth with emphasis on viruses, archaea and bacteria. Functional roles of microorganisms, their population dynamics and interactions, and their mechanisms of evolutionary change in a variety of environmental settings, including natural communities and laboratory microcosms.
Attributes: Writing Intensive Course
Prerequisite(s): GEN 604 with a minimum grade of D- and BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D-.
Equivalent(s): MICR 713
Grade Mode: Letter Grading

GEN 714 - Personal Genomics
Credits: 4
Analysis and implications of personal genomic data is the focus of this course. Students understand and appreciate all aspects of the availability of personal genomic information and tools including scientific, medical, social, ethical and legal issues. Students have the opportunity to analyze their own individual genome to one of the publicly available genomes to learn about all various aspects of this emerging field. The course will be an entirely online format.
Prerequisite(s): GEN 604 with a minimum grade of D-.
Grade Mode: Letter Grading

GEN 715 - Molecular Evolution
Credits: 4
Rates and patterns of evolutionary change in biomolecules. Forces affecting the size and structure of genomes. Molecular mechanisms of organismal evolution. Emphasizes integrating evidence from biochemistry, molecular genetics and organismal studies. Methods for reconstructing phylogeny from molecular sequences. Some knowledge of statistics recommended. Computer Lab.
Prerequisite(s): GEN 604 with a minimum grade of D-.
Equivalent(s): ZOOL 715
Grade Mode: Letter Grading

GEN 717 - Molecular Microbiology
Credits: 5
Fundamental physiological and metabolic processes of archaea, bacteria and fungi with a strong emphasis on prokaryotes. Literature-based course. Topics include regulation and coordination of microbial metabolism, bacterial cell cycle, global control of gene expression, signal transduction, and microbial cell differentiation. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): BMS 503 with a minimum grade of D- and BMS 504 with a minimum grade of D- and GEN 604 with a minimum grade of D-.
Equivalent(s): MICR 717
Grade Mode: Letter Grading
Special Fee: Yes

GEN 721 - Comparative Genomics
Credits: 4
Explores the central questions and themes in contemporary comparative genomics, including genome biology, phylogenomics, human origins, population genomics, and ecological genomics. Provides the conceptual framework required to evaluate new work in this fast-changing field.
Prerequisite(s): GEN 604 with a minimum grade of D-.
Grade Mode: Letter Grading

GEN 725 - Population Genetics Lab
Credits: 2
Hands-on approach to exploration of evolutionary forces affecting the frequency and distribution of genetic variation in natural populations. Wet lab techniques include DNA extraction, restriction enzyme digestion, PCR, DNA fragment size-selection. Computational skills include high-throughput sequencing data control, identifying allelic variants, and generation of population genetic summary statistics.
Co-requisite: GEN 705
Prerequisite(s): GEN 604 with a minimum grade of D- and BIOL 528 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

GEN 771 - Molecular Genetics
Credits: 4
Structure, organization, replication, dynamics, and expression of genetic information in eukaryotes. Focus on molecular genetic and epigenetic mechanisms of gene expression and its control; molecular genetic control of cell division and differentiation during development.
Prerequisite(s): GEN 604 with a minimum grade of D-.
Grade Mode: Letter Grading

GEN 772 - Evolutionary Genetics of Plants
Credits: 4
Explores diverse aspects of plant genetic change in nature and under human influence. Emphasis will be placed on the unique aspects of plants, such as polyploidy and distinctive mating systems.
Attributes: Writing Intensive Course
Prerequisite(s): GEN 604 with a minimum grade of D-.
Grade Mode: Letter Grading

GEN 774 - Techniques in Plant Genetic Engineering and Biotechnology
Credits: 4
This course offers a comprehensive exploration of molecular biology and biotechnological techniques used to manipulate plant genomes. It introduces foundational topics such as genetic engineering principles, molecular cloning, gene editing (including CRISPR/Cas9), and transgenic plant technologies.
Prerequisite(s): GEN 604 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

GEN 790 - Undergraduate Teaching Experience
Credits: 1-4
Provide academic support to graduate teaching assistants or faculty in preparing, presenting, and executing Genetics lectures or labs.
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): MICR 790
Grade Mode: Letter Grading

GEN 795 - Investigations in Genetics
Credits: 1-4
Advanced research or scholarly projects developed and conducted under the supervision of a faculty member. Provides the opportunity to apply advanced knowledge and techniques of the major to a specific problem or question.
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): GEN 795W
Grade Mode: Letter Grading

GEN 795W - Investigations in Genetics
Credits: 1-4
Advanced research or scholarly projects developed and conducted under the supervision of a faculty member. Provides the opportunity to apply advanced knowledge and techniques of the major to a specific problem or question.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): GEN 795
Grade Mode: Letter Grading

GEN 799 - Senior Thesis
Credits: 1-4
Independent research project under the direction of a faculty sponsor for seniors in genetics. Final product is a written thesis. One or two semesters.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

GEN 799H - Honors Senior Thesis
Credits: 1-4
Independent research project under the direction of a faculty sponsor for seniors in genetics and in the Honors Program. Final product is a written thesis. One or two semesters.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Geography (GEOG)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

GEOG 401 - World Regions: Europe and the Americas
Credits: 4
Examines the rich diversity of human life in the following world regions: North America; Middle and South America; Europe; Russia and the post-Soviet states; and Oceania. We will examine the geography of these regions focusing on the following thematic concepts: Environment; Globalization and development; power and politics; urbanization; and population patterns. This course also serves as an introduction to geography.
Attributes: World Cultures(Discovery)
Equivalent(s): GEOG 401H
Grade Mode: Letter Grading

GEOG 402 - World Regions: Asia and Africa
Credits: 4
Examines the unique integration of human and physical phenomena that produces the distinctive character of the following world regions: the Middle East an North Africa; Sub-Saharan Africa; South Asia; Southeast and East Asia. The course also serves as an introduction to the discipline of geography, with its unique spatial perspective.
Attributes: World Cultures(Discovery)
Equivalent(s): GEOG 402H
Grade Mode: Letter Grading

GEOG 405 - There Is No Planet B
Credits: 4
Introduces human-environment relations as a central focus of geography, spanning social and environmental sciences. Considers mapping, natural resource use, commons and markets, hazards, political ecology, and land use change. Case studies link core concepts with examples from local to international scales.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

GEOG 473 - Elements of Weather
Credits: 4
Basic principles of weather phenomena and the physical processes underlying these phenomena. Emphasis on weather patterns of New England. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Grade Mode: Letter Grading

GEOG 500 - Making Change: Social and Environmental Justice in Practice
Credits: 4
Provides students with opportunities to consider a personal philosophy and professional action plan for social and/or environmental justice, bridging understandings of social equity and environmental conservation. Spanning theoretical and practical perspectives, students will learn basic community organizing and grantwriting skills that are useful in a range of careers, particularly in the non-profit and government sectors.
Grade Mode: Letter Grading

GEOG 530 - China: People, Politics and Economy
Credits: 4
This course examines China's diverse physical environments, politics, economies, and cultures across he vast territory. Students learn to adopt a relational and spatial perspective to study the contemporary issues in China.
Attributes: World Cultures(Discovery)
Equivalent(s): GEOG 530W
Grade Mode: Letter Grading

GEOG 550 - Sub-Saharan Africa: Environmental Politics and Development
Credits: 4
Explores the political ecologies of development in sub-Saharan Africa. Provides a historical and spatial perspective on sub-Saharan Africa's environments and the politics that influence the region's conservation and development choices. Students will critique conventional knowledge, ideas, and explanations to develop a deeper understanding of environment-development linkages in sub-Saharan Africa over time.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

GEOG 560 - Natural Hazards and Human Disasters
Credits: 4
A survey of natural hazards, including earthquakes, volcanoes, tsunami, floods drought, hurricanes and severe weather, and the human disasters they cause. The geography of community vulnerability to natural hazards and the factors that influence risk and recovery are also examined.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

GEOG 572 - Geography of the Natural Environment
Credits: 4
Provides an introduction to geography of the natural environment, including landforms, weather and climate, water resources, and biogeography. Examines the processes that shape the different elements of the environment and the relationships between them.
Attributes: Physical Science(Discovery)
Grade Mode: Letter Grading

GEOG 574 - Global Landscapes and Environmental Processes
Credits: 4
A survey of earth's major landforms and the geographic factors that influence their development, distribution, and morphology. Topics include mountain building, river systems, desert migration and expansion, glacial and periglacial environments, and shoreline evolution. Discusses interactions with human activities and climate change. Emphasizes how these processes interact to form surface features that are unique to their geographic environment.
Attributes: Physical Science(Discovery)
Grade Mode: Letter Grading

GEOG 580 - Human Geography: People and Places
Credits: 4
Why do people live, work, and play differently in different places? How are our realities shaped by local to global influences, both social and environmental? What does this mean in terms of "place" and lived landscapes? This course provides an overview of human geography as a social science, including the "why of where" and human-environment relationships. Topics may include urban, rural, and suburban development, globalization and governance, borders and migration, conservation and development, and different understandings of knowledge, economy, technology, race, gender, and class.
Attributes: Social Science (Discovery)
Equivalent(s): GEOG 581O
Grade Mode: Letter Grading

GEOG 581 - Society, Environment and Justice
Credits: 4
Introduces human geography with an emphasis on social justice and environmental justice, integrating social and cultural aspects of space, place, and human-environment relations. Discusses urban, suburban, and rural examples in the US and internationally to illustrate basic geographic concepts.
Attributes: Social Science (Discovery); Inquiry (Discovery)
Grade Mode: Letter Grading

GEOG 582 - Global Trade and Local Development
Credits: 4
This course examines the ways in which global trade interacts with local development across the world. It studies the special organization of economic activities through basic approaches in economic geography. It also studies the history and contemporary state of international competition and collaboration.
Attributes: Social Science (Discovery)
Equivalent(s): GEOG 582W
Grade Mode: Letter Grading

GEOG 584 - Place and Power: Political Geographies from Personal to Global
Credits: 4
This course introduces the breadth of contemporary political geography. It considers relationships between space/place and social power across personal to global scales. This may include geographic perspectives on socio-cultural identity, territory, migration, the state, civil society, borders, sovereignty, democracy, governance, citizenship, colonialism, neoliberalism, postcolonialism, justice, social change, conflict, violence, security, and geopolitics. It is a discussion seminar with readings, short, informal writings, student-driven discussion, limited lecture, more structured writings, and guided revision.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

GEOG 591 - Making Maps: GIS Fundamentals
Credits: 4
Introduces Geographic Information Systems (GIS) to design digital maps, integrate diverse data sources, and conduct basic spatial analyses. Appropriate for students with or without computer technology background. Skills are highly employable in many careers where spatial data can be used, including social justice, public health, sustainability, town and urban planning, economic development, public safety, energy, transportation, construction, environmental hazards, political strategy, security and diplomacy, military intelligence, marketing, education, communications, real estate, and public humanities.
Grade Mode: Letter Grading

GEOG 670 - Climate and Society
Credits: 4
An introduction to climate science and the interaction between humans and climate. Examines the processes that control climate, the mechanisms that drive climate change, and the impact of climate change on society.
Attributes: Writing Intensive Course
Equivalent(s): GEOG 570
Grade Mode: Letter Grading

GEOG 673 - From Political Ecology to Climate Justice
Credits: 4
This course considers the relationship between the environment and social power, including international and US case studies that reveal how social differences such as class, race, ethnicity, and gender intersect with environmental aspects of rural and urban development, food systems, natural resources, technology, sustainability, and climate change mitigation, adaptation, and resilience. It compares solutions offered by government, business, and civil society. It is a discussion seminar with readings, short, informal writings, student-driven discussion in small groups, limited lecture, and more structured writing with guided revision.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

GEOG 695 - Internship
Credits: 1-4
Internships provide an opportunity for on-the-job skill development and practical experience in a closely supervised work setting. The student must provide a written proposal to a supervising faculty member before an internship program is approved. At the end of the semester, the student must make a presentation, provide work samples, or submit a detailed report, log, or portfolio describing the internship experience.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

GEOG 701 - Environmental Justice
Credits: 4
This is a seminar-style discussion course in Environmental Justice. It supports students as they develop facility in linking theory, case material, and personal scholarly-professional goals. Readings and writings cover a breadth of topics including origins and theory of environmental justice as social movement and field of scholarship; environmental toxins, hazards, and public health; race and indigeneity; climate change mitigation and adaptation; knowledge systems; urban planning, housing and transportation; water resources; food systems; conservation and recreation; participatory research; and cross-scalar analyses. The course assumes familiarity with basic social science perspectives on race, difference, and equity, and general awareness of environmental issues.
Grade Mode: Letter Grading

GEOG 795 - Special Project
Credits: 2 or 4
Readings, library, archival, and fieldwork. Primarily for geography seniors.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

German (GERM)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

GERM 401 - Elementary German I
Credits: 4
For students without previous training in German. Aural comprehension, speaking, writing, reading in a cultural context. No credit for those with two or more years of German in secondary school.
Grade Mode: Letter Grading

GERM 402 - Elementary German II
Credits: 4
See description for GERM 401.
Attributes: Foreign Language Requirement
Prerequisite(s): GERM 401 with a minimum grade of D-.
Grade Mode: Letter Grading

GERM 503 - Intermediate German I
Credits: 4
Review of grammar; practice in oral and written expression; readings and cultural material. Labs.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Prerequisite(s): GERM 402 with a minimum grade of D-.
Grade Mode: Letter Grading

GERM 504 - Intermediate German II
Credits: 4
Review of grammar; practice in oral and written expression; readings and cultural material. Labs.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Prerequisite(s): GERM 503 with a minimum grade of D-.
Grade Mode: Letter Grading

GERM 525 - Introduction to German Culture and Civilization
Credits: 4
Aspects of the political, social, and cultural life of Germany, Austria, and Switzerland. Conducted in English. Strongly recommended for any students planning study abroad in a German-speaking country. Required for the major, can be taken for the minor.
Attributes: World Cultures(Discovery); Inquiry (Discovery)
Equivalent(s): GERM 525H
Grade Mode: Letter Grading

GERM 586 - Study in Berlin
Credits: 0-8
Gives students an immersion experience in the German language and culture. Students will study 5 weeks in Berlin, where they will take an intensive language course (80 hours) at the BSI Private Language School, receive cultural instruction from the on-site UNH faculty member, and pursue an individual research project.
Co-requisite: INCO 589
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading
Special Fee: Yes

GERM 631W - Advanced Communications Skills I
Credits: 4
Intensive practice in vocabulary building and developing a sense of appropriate style for various contexts of oral and written communication. Discussion and writing on topics of current interest, written and oral reports, role play, and simulation of everyday situations, reinforced by written work.
Attributes: Writing Intensive Course; Foreign Language Requirement
Prerequisite(s): GERM 504 with a minimum grade of D-.
Equivalent(s): GERM 631, GERM 631H
Grade Mode: Letter Grading

GERM 632 - Advanced Communications Skills II
Credits: 4
Intensive practice in vocabulary building and coherent expression in a variety of stylistic contexts. Special emphasis on writing skills, from expository prose to letter and resume writing, essays, journalistic reports, and creative writing, focusing on topics of current interest. Required for the German major.
Attributes: Foreign Language Requirement
Prerequisite(s): GERM 504 with a minimum grade of D-.
Grade Mode: Letter Grading

GERM 728 - Modern German Literature
Credits: 4
Major literary movements from 1872 to 1945. Reading and analysis of selected works. Conducted in German.
Attributes: Writing Intensive Course
Equivalent(s): GERM 728H
Grade Mode: Letter Grading

GERM 732 - Public Discourse and Current Affairs
Credits: 4
Conducted in German. Public discourse and current affairs in German speaking societies. Analysis and interpretation of various media and contemporary events. Refinement of writing and stylistics with particular focus on grammatical accuracy and advanced composition.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

GERM 797 - Special Studies in German Language and Literature
Credits: 4
Selected topics in language, culture, and literature. Conducted in German. May be repeated barring duplication of subject.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

GERM 798 - Special Studies in German Language and Literature
Credits: 4
Selected topics in language, culture, and literature. Conducted in German. May be repeated barring duplication of subject.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

Gerontology (GERO)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

GERO 500 - I'm Old, So What! An introduction to aging in the United States
Credits: 4
This is the first of two mandatory courses for the GERO Minor, but any student may take it as an elective. It introduces the learner to the field of gerontology (the study of how people age). It explores the biological, psychosocial, and cognitive changes within the context of society. The history of ageism and its influence on how it has affected the individual, families, and society is presented. The range of independence among older people is examined. Various disciplines that work within the field of gerontology are reviewed. Lectures, novels, films and guest speakers help to examine growing old in the U.S.
Attributes: Writing Intensive Course
Equivalent(s): GERO 600
Grade Mode: Letter Grading

GERO 795 - Independent Study
Credits: 1-6
Open to Gerontology Minor students only. Content area determined by student and faculty mentor, topic must have a major aging component. A proposal of work must be signed by both student and faculty mentor and given to the Gerontology Minor Coordinator for final approval. Proposals are filed in the student's declared major academic folder. Work may be completed over two semesters, especially if it involves thesis/internship work. Credits compensatory with work: 1 to 6.
Prerequisite(s): GERO 500 with a minimum grade of D- and KIN 607 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 6 credits.
Grade Mode: Letter Grading

Global Conflict and Human Security (GCHS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

GCHS 710 - Conflict & Human Security
Credits: 4
Examines patterns and trends of armed conflict, especially terrorism, insurgency and civil war in the 21st century. Reviews conditions that are likely to lead to war and the myriad ways conflict affects the economy, political system, and cultural norms of a society. Explores how civil wars end, key elements of effective peace processes, and the conditions under which mass violence is likely to resume. Examines conflict prevention strategies such as: preventing and countering violent extremism (P/CVE), disarmament, demobilization and reintegration (DDR) of combatants, and reform of police and military forces (security sector reform/SSR). Case studies on countries in Asia, Middle East, Africa and Latin America.
Grade Mode: Letter Grading

GCHS 720 - Global Governance
Credits: 4
An introduction to the concepts and theories of global governance. Examines the role governments, non-governmental organizations, institutions, civil society, and other actors play in the development and implementation of international law and policies. Focuses on the global institutional infrastructure for foreign aid, humanitarian relief, development programs, peacebuilding, and human rights advocacy. Explores how multilateral organizations, non-governmental organizations and other actors promote human security and sustainable development in countries with weak governments.
Grade Mode: Letter Grading

GCHS 730 - International Development & Human Security
Credits: 4
Introduces international development policy and practice. Explores the interrelatedness of the United Nations' distinct human security domains (economic, food, health, environmental, personal, community, and political security), and reviews their connections to the UN Sustainable Development Goals (e.g., zero hunger, peace, justice and strong institutions). Examines the strategies used by humanitarian and development organizations to enhance people's well#being in fragile states and conflict zones. Topics include: ethics of humanitarianism; how to create effective programs to alleviate poverty, tackle corruption and empower women and girls. Case studies on countries in Asia, Middle East, Africa and Latin America.
Grade Mode: Letter Grading

Greek (GREK)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

GREK 401 - Elementary Classical Greek I
Credits: 4
Explore the world of the ancient Greeks by learning the basic elements of Attic Greek: the alphabet, vocabulary and grammar. By the end of the first semester students will be prepared to read short adapted passages on the history, poetry, ,philosophy, religion (ancient Greek and early Christianity), mythology, politics, theater and culture of the ancient Greeks and the many other cultures that they were associated with.
Grade Mode: Letter Grading

GREK 402 - Elementary Classical Greek II
Credits: 4
A continuation of GREK 401, this course expands students' abilities to read simple to moderate complex Greek passages, furthering their insights into the fascinating language and cultural practices of the Ancient Greeks.
Attributes: Foreign Language Requirement
Grade Mode: Letter Grading

GREK 503 - Intermediate Classical Greek I
Credits: 4
Readings from Xenophon, Plato, Herodotus, Euripides, and the New Testament.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Grade Mode: Letter Grading

GREK 504 - Intermediate Classical Greek II
Credits: 4
Readings from Xenophon, Plato, Herodotus, Euripides, and the New Testament.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Grade Mode: Letter Grading

GREK 751 - Homer and the Archaic Period
Credits: 4
Readings from the Iliad, the Odyssey, the Homeric hymns, Hesiod, Pindar, and the lyric poets.
Grade Mode: Letter Grading

GREK 753 - Advanced Study in Athenian Literature
Credits: 4
A) Aeschylus, B) Sophocles, C) Euripides, D) Aristophanes, E) Herodotus, F) Thucydides, G) Xenophon, H) Plato, I) Aristotle, J) Lysias, K) Demosthenes, L) Isocrates. Major Attic authors from the Battle of Marathon to the death of Alexander the Great. Each special topic may be repeated two times.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

GREK 795 - Special Studies
Credits: 4
A) Pre-Socratic Philosophers; B) Hellenistic Greek Authors; C) Menander; D) Callimachus; E) Apollonius of Rhodes; F) Theocritus; G) Polybius; H) Greek Authors of the Roman Empire; I) Plutarch; J) Septuagint; K) New Testament; L) Greek Church Fathers; M) Byzantine Authors; N) Spoken Greek O) Advanced Greek Composition; P) Introduction to Classical Scholarship; Q) Greek Epigraphy; R) Greek Dialects; S) Comparative Grammar of Greek and Latin; T) Homer: A Linguistic Analysis; U) Greek Institutions; V) Paleography and Textual Criticism. Topics selected by instructor and student in conference. Each special topic may be repeated two times.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Health & Human Services (HHS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HHS 400A - UNH-4U: Career and Professional Seminar
Credits: 1-4
In this seminar, UNH-4U students will explore career interests, develop career plans, and learn and practice skills needed to land a job or internship. Specific objectives include: 1) articulating career goals and competencies; 2) creating an academic and career development plan; 3) demonstrating skills for job and internship pursuit; and 4) engaging in professional networking. UNH-4U students can participate in the seminar up to 4 semesters with specific seminar activities established in consultation with mentor.
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 16 times.
Grade Mode: Credit/Fail Grading

HHS 400B - UNH-4U Seminar: Academic Success and Well-Being Seminar
Credits: 1-4
In this UNH-4U seminar, students will focus on resource availability and resource navigation to support academic success, healthy living, and well-being. Specific objectives include: 1) identifying and articulating goals in the areas of academic success, healthy living, and well-being; 2) establishing resource utilization plans in support of each of these goals; 3) demonstrating targeted knowledge and skills related to independence in managing individual needs. UNH-4U students can participate in the seminar up to 4 semesters with specific seminar activities established in consultation with mentor.
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 16 times.
Grade Mode: Credit/Fail Grading

HHS 400C - UNH-4U Seminar: Independent Study
Credits: 1-4
Qualified UNH-4U student will be permitted to pursue independent studies under faculty guidance.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Credit/Fail Grading

HHS 400D - UNH-4U Seminar: Advanced Career and Professional Seminar
Credits: 1-6
In this seminar, second year UNH-4U students will meet with instructor for weekly sessions to expand upon skills gained in HHS 400A in working toward individualized career goals. Students will practice skills needed to secure a job or internship. Specific objectives include: 1) update resume and cover letter; 2) create and/or a career portfolio; 3) engage in mock interviews; 4) actively seek and apply for paid employment and internship opportunities that align with career goals; 5) engage in professional networking; and 6) develop a job retention and growth plan. UNH-4U students may participate in the seminar up to 4 semesters with specific seminar activities established in consultation with mentor.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Credit/Fail Grading

HHS 401 - College of Health and Human Services Seminar
Credits: 0-2
This course is an introduction to the curricular and co-curricular aspects of the University and specifically the College of Health and Human Services. The course will focus on resource navigation, major and career exploration and fostering “knowledge for healthy living”.
Grade Mode: Credit/Fail Grading

HHS 402 - Spring ACE Seminar
Credits: 1 or 2
This course will guide CHHS students as they identify ways to self-reflect and build experience to continue on the path to becoming well rounded students. An emphasis will be placed on identifying ways to build transferable skills through involvement beyond the classroom such as clubs and orgs, CHHS institutes, research, and activities applicable to the student's field of interest.
Grade Mode: Credit/Fail Grading

HHS 500 - ACE Peer Leadership
Credits: 0-2
In this course, you will be given the opportunity to further your leadership and transferable professional skills. Through both mentoring a first-year student as well as partnering with an assigned professional academic advisor, you will develop critical skills in classroom management, public speaking, group and personal communication, and organization by supporting the facilitation of a first-year seminar, providing peer mentoring and advising, and engaging in professional development opportunities throughout the semester.
Repeat Rule: May be repeated for a maximum of 6 credits. May be repeated up to 3 times.
Grade Mode: Credit/Fail Grading

HHS 697W - Professional Writing in the Health and Human Services
Credits: 1-4
This course will focus on professional writing skills for the health sciences and human services professionals. Writing in these professions is unique because written communication often serves as the foundation for clinical and programmatic decision making requiring swift, precise, accurate, defendable, and objective writing. With this is mind, this course will focus on clinical recording, case documentation, cover letters, fact sheets, brief reports, memos, and infographics.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 1 time.
Grade Mode: Letter Grading

HHS 698 - Special Topics
Credits: 1-2
Explores areas related to specific professional health interests. May repeat but not duplicate subject areas. A) Communication Disorders, B) Health Management and Policy, C) Medical Laboratory Science, D) Nursing, E) Occupational Therapy, F) Kinesiology, G) Recreation Management and Policy, J) Family Studies, K) Social Work, L) Health Promotion, M-Z) Interdisciplinary.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Credit/Fail Grading

HHS 710 - Introduction to Telehealth
Credits: 4
This course focuses on the ever-changing landscape of telehealth through the lens of various health and human services disciplines. Students will explore topics such as the digital divide, telepresence, ethics, telehealth technology, and current practices in telehealth. In addition to completing weekly modules that span a variety of key telehealth topics, students will work collaboratively at a distance to create a multi-media project focused on a telehealth topic of interest.
Grade Mode: Letter Grading

HHS 798 - Special Topics
Credits: 1-4
Explores areas related to specific professional health interests. May repeat but not duplicate subject areas. A) Communication Disorders, B) Health Management and Policy, C) Medical Laboratory Science, D) Nursing, E) Occupational Therapy, F) Kinesiology, G) Recreation Management and Policy, J) Family Studies, K) Social Work, L) Health Promotion, M-Z) Interdisciplinary. Special fee on some topics.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 7 times.
Grade Mode: Letter Grading
Special Fee: Yes

Health and Physical Education (HPE)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HPE 500 - Introduction to Health & Physical Activity Promotion
Credits: 2
This course introduces key concepts in promoting health and physical activity across the lifespan. Students will explore wellness principles, social and behavioral determinants of health, strategies for behavior change, and educational and public health frameworks. Emphasis is placed on understanding how health and physical activity contribute to individual and community well-being. Students will also examine diverse professional roles and career pathways in schools, healthcare, workplaces, and community-based health promotion and recreational settings.
Equivalent(s): KIN 500
Grade Mode: Letter Grading

HPE 570 - Elementary Physical Education Practicum
Credits: 4
As a prospective teacher, you will be asked to examine, discuss, and implement teaching strategies learned in HPE 610 - Elementary Physical Education Pedagogy. Sixty hours of observation and teaching in the schools will be expected. As this is a "gateway" course to student teaching or the 5th year internship, it is expected that students invest efforts into the development of pedagogical skills needed for effective teaching.
Attributes: Writing Intensive Course
Prerequisite(s): HPE 610 with a minimum grade of D-.
Equivalent(s): KIN 570
Grade Mode: Letter Grading
Special Fee: Yes

HPE 600 - Movement and Gymnastics Exploration
Credits: 4
This course is designed to enhance the students' knowledge of and ability to demonstrate, implement, and evaluate the movement fundamentals and gymnastics skills and progression that forms the foundation of preschool, elementary, and secondary school physical education content. The course will combine the elements of movement education and gymnastics progressions to develop a basis for students to learn the fundamentals of movement and how to teach them.
Equivalent(s): KIN 600
Grade Mode: Letter Grading

HPE 601 - Foundations of Lifetime Physical Activity
Credits: 3
Why do some people stay active for life while others struggle to get moving? This course explores physical activity participation and promotion across the lifespan through a social ecological lens. Students will investigate how beliefs, environments, policies, technologies, and more shape opportunities for movement. Through reflective discussions and within physically active learning across lifetime activities, students will develop foundational knowledge and skills to understand and promote meaningful and sustainable physical activity in diverse communities.
Equivalent(s): KIN 601
Grade Mode: Letter Grading

HPE 603 - Game On! Playing and Leading Team Sports and Activities
Credits: 3
This active, hands-on course engages students in playing and leading team sports and cooperative games using tactical, player-centered approaches. Learning opportunities emphasize small-sided and modified games that encourage students to explore how strategy, skill, communication, and decision-making emerge through play. Foundational instructional practices are introduced to support developmentally appropriate, inclusive experiences. Students gain knowledge, skills, and dispositions necessary to enjoy as well as lead meaningful physical activity in diverse team-based settings.
Equivalent(s): KIN 603
Grade Mode: Letter Grading

HPE 610 - Teaching Young Children Through Movement
Credits: 4
This course explores the foundations of physical activity for young children, with an emphasis on what to teach and how to create meaningful, developmentally appropriate movement experiences. Using a skill theme and movement concept approach, the course prepares students to support children's motor development and physical activity experiences in school and community settings through hands-on learning, readings, discussions, assignments, and opportunities to design and lead activities for children. Students will gain practical experience and build confidence in fostering movement skills that promote health, enjoyment, and lifelong engagement in physical activity.
Equivalent(s): KIN 610
Grade Mode: Letter Grading

HPE 648 - Moving Towards Well-Being: Principles of Health Behavior Change for Health and Wellness Educators
Credits: 4
Do you want to help others achieve health and well-being? This class emphasizes a salutogenic approach to examine the foundations of health behavior change across different dimensions of wellness, explores social and environmental factors that can impact health outcomes, and develops the ability to teach others the skills necessary to improve health and well-being in a variety of school, healthcare, fitness, or other settings.
Equivalent(s): KIN 648
Grade Mode: Letter Grading

HPE 653B - Biomechanics of Human Movement
Credits: 2
Principles and methodology of analyzing movement in sport and physical education using principles of biomechanics and physics. Uses videos and field-based methodology to facilitate students' understanding of movement analysis and applying analyses to teaching and coaching.
Prerequisite(s): BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-.
Equivalent(s): KIN 653B
Grade Mode: Letter Grading

HPE 655 - Middle School and Secondary Physical Education Pedagogy
Credits: 4
Course content will include concepts related to effective teaching such as: planning, organization, communication, management, modifications, and evaluation. Mosston's spectrum of teaching styles will be discussed in relationship to meeting the individual needs of students. Curriculum models will be discussed in order to show the range of content available to physical educators. Application of theoretical concepts will occur in peer teaching episodes.
Equivalent(s): KIN 655
Grade Mode: Letter Grading

HPE 671 - Health Education Pedagogy
Credits: 4
This course provides a foundation for teaching health education in K-12 settings. Aligned with the CDC Characteristics for Effective Health Education, the course builds on previous knowledge of the National Health Education Standards and other appropriate practices while preparing pre-service teachers to increase the health literacy and proficiency levels of their future students.
Equivalent(s): KIN 671
Grade Mode: Letter Grading

HPE 675 - Motor Development and Learning Across the Lifespan
Credits: 4
This course examines how humans develop and learn movement skills across the lifespan and how these processes influence physical activity, recreation, and daily life. Drawing on ecological and developmental perspectives, students explore how individual traits, environments, and tasks shape motor behavior and physical activity. Topics include motor development theory, motor learning, physical literacy, and movement constraints. Emphasis is placed on how motor competence supports lifelong physical activity, autonomy, and wellbeing.
Equivalent(s): KIN 675
Grade Mode: Letter Grading

HPE 676 - Adventure Activities
Credits: 3
This course provides for the acquisition of knowledge and skills for students to utilize adventure education methods and philosophies when teaching physical education through an experiential pedagogy. Students will be exposed to adventure methodologies: climbing, orienteering, initiatives, low ropes course and high ropes course. Students will realize facilitation and teaching strategies through peer and practice teaching with local students from Oyster River Middle School in Durham.
Equivalent(s): KIN 676
Grade Mode: Letter Grading

HPE 694 - Supervised Teaching in Health and Physical Education
Credits: 6
Students in this course will be involved in observing, assisting and teaching health and physical education classes in local schools as their culminating experience in the HPE major. These experiences will be augmented by weekly seminars whereby issues pertaining to focused observations and thoughts related to teaching and learning will be discussed. Throughout the duration of this course, students will be asked to reflect on the teaching they observe as well as their own teaching.
Co-requisite: EDUC 694D
Equivalent(s): KIN 694
Grade Mode: Credit/Fail Grading

HPE 696 - Independent Study in Health and/or Physical Education
Credits: 2-4
An advanced, individual scholarly project under the direct supervision of a faculty member.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 4 times.
Grade Mode: Letter Grading

HPE 702 - Health Content and Youth Risk Behavior
Credits: 4
Explore topics related to adolescent health, well-being, and risk behaviors that are relevant in the health education classroom today. Grounded in health behavior theories and behavior change, students explore ten dimensions of wellness: Cultural, Emotional, Environmental, Financial, Intellectual, Occupational, Physical, Sexual, Social, and Spiritual. Students develop a content base for teaching Standard 1 of the National Health Education Standards in coordination with the skill standards as outlined by the NH Health Education Curriculum Guidelines.
Equivalent(s): KIN 702
Grade Mode: Letter Grading

HPE 712 - Health Education Practicum
Credits: 4
This practicum provides prospective health educators an opportunity to observe, develop, and practice teaching skills and functional information in health education settings. Students are expected to accumulate 60 hours of observing, assisting and teaching experience in a K-12 school or community-based setting. In addition, weekly seminars integrate field experience with lesson planning, current issues in teaching health education, and an understanding of the professional, legal, and ethical considerations pertaining to health education. This serves as an opportunity for refinement and continued development of your skills and attributes for teaching health education. All students seeking to complete the HPE Teacher Licensure track must have a placement in a K-12 school-based health education classroom.
Co-requisite: NUTR 400
Prerequisite(s): HPE 648 with a minimum grade of D- and HPE 671 with a minimum grade of D- and HPE 702 with a minimum grade of D-.
Equivalent(s): KIN 712
Grade Mode: Letter Grading

HPE 766 - Middle School and Secondary Physical Education Practicum
Credits: 4
Students in this course will be given the opportunity to spend 60 hours in a middle or high school observing, assisting and teaching physical education classes. These experiences will be augmented by weekly seminars whereby issues pertaining to focused observations and thoughts related to teaching and learning will be discussed. A major culminating "I Believe" paper will be required and this course will be the HPE capstone experience.
Attributes: Writing Intensive Course
Prerequisite(s): HPE 655 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): HPE 666, KIN 666
Grade Mode: Letter Grading

HPE 781 - Introduction to Adapted Physical Education
Credits: 4
This course covers with the skills to adeptly execute diverse physical activity programs tailored to the specific requirements of individuals with disabilities within K-12 school settings. The focus of the course lies in addressing considerations for physical activity programming and understanding the characteristics of individuals dealing with developmental, physical, emotional, sensory, health, learning, and/or multiple disabilities. This course begins with an understanding of the term disability followed by the legal mandates that define school policy and student placement. Throughout the course an overview of disability will be analyzed with readings that include an analysis of the social medical models designed to challenge the social construction of disability and orientations for practice. Classroom time will also include direct teaching of individuals with disabilities in physical activity settings.
Attributes: Writing Intensive Course
Equivalent(s): KIN 781
Grade Mode: Letter Grading

Health Care (HLTC) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HLTC 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in Health Care. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): HLTC 544G
Grade Mode: Letter Grading

HLTC 550 - The Emerging U.S. Health Care System
Credits: 4
This course traces the evolution of the U.S. health care delivery system over the last century with a focus on the structure and function of the contemporary managed care system. The course examines a wide range of factors (sociocultural, political, economic, legal and technical) which have impacted the evolution of the current system. Economic factors related to the delivery of health care services are extensively covered. Comparative health care systems are examined. The impact of the changing demographics of the U.S. population on the design and delivery of health care is reviewed.
Attributes: Writing Intensive Course
Equivalent(s): HLTC 550G, HMP 401
Grade Mode: Letter Grading

HLTC 560 - Health Behaviors: Theoretical Foundations for Health Education
Credits: 4
This course explores how psychological theories and techniques can minimize unnecessary morbidity and premature mortality. Applied behavioral and cognitive techniques that target primary and secondary prevention efforts are identified through theory and research. Effective health coaching and education techniques that support the compliance of healthy behaviors will be introduced.
Attributes: Writing Intensive Course
Equivalent(s): HLTC 560G
Grade Mode: Letter Grading

HLTC 590 - Introduction to Fiscal Management in Health Care
Credits: 4
This course is designed for health care managers who do not have a background in financial management. As an introduction to the tools and processes that empower managers entrusted with budgetary oversight, the course provides fundamental skills for effective financial management in the rapidly changing health care environment. Students become prepared to make their organizations more effective in the four managerial functions of planning, organizing, leading and controlling by balancing inflows (revenues) and outflows (expenses), successfully monitoring and controlling costs and staffing, and identifying areas to be targeted for improvement. Strategies to acquire and allocate funds and to plan, analyze, and control financial operations are introduced.
Equivalent(s): HLTC 555G, MGMT 555G
Grade Mode: Letter Grading

HLTC 595 - Practicum in Health Care
Credits: 4
This project-based practicum is an entry-level field experience designed to assist health care-related majors in exploring career and vocational settings in which they can use and apply their knowledge and skills. The practicum is exploratory in nature, involves extensive student initiative in designing and implementing the practicum, and is conducted under the supervision of the practicum mentor. A supplementary objective of the practicum is to explore and assess possibilities for settings and situations in which the student may engage for the internship of HLTC 795 or to investigate an evidence-based health and wellness topic for HLTC 798. Earlier registration deadlines apply. Please consult your advisor.
Prerequisite(s): HLTC 550 with a minimum grade of D- or HLTC 550G with a minimum grade of D-.
Equivalent(s): HLTC 540G
Grade Mode: Letter Grading

HLTC 612 - Population Health
Credits: 4
This course outlines how health care and health education delivery for various populations and communities have evolved. Topics include health behaviors, social determinants of health, cultural influences, health policy and economics, and how frameworks for health care systems influence disease prevention strategies. This course analyzes population health issues from multiple perspectives and examines community assessment strategies. The course also emphasizes the promotion of a healthy lifestyle for the individual and populations to reduce morbidity and mortality rates.
Prerequisite(s): HLTC 550 with a minimum grade of D- or HLTC 550G with a minimum grade of D- or HMSV 424 with a minimum grade of D- or HMSV 500G with a minimum grade of D- or BEHS 502G with a minimum grade of D-.
Equivalent(s): HLTC 612G, HMP 403
Grade Mode: Letter Grading

HLTC 627 - Reimbursement and Financing Techniques in Health Care
Credits: 4
This course analyzes various methods of health care financing, including Medicare/Medicaid, private insurance (including HMOs), and self-funding. It then discusses the various methodologies for reimbursement under these programs, including fee-for-service, capitation, and DRGs, and their impact on the health care organizations providing the services. Students will analyze how budgets, expenses, and financial statements, etc., are linked to the reimbursement process, and they will examine the role of the non-financial manager in health and human services in these processes.
Prerequisite(s): HLTC 555G with a minimum grade of D- or HLTC 590 with a minimum grade of D-.
Equivalent(s): HLTC 627G, HMP 740, HMP 741
Grade Mode: Letter Grading

HLTC 690 - Law and Ethics for Health Care and Human Services
Credits: 4
This course provides students with legal and ethical frameworks for working through increasingly complex issues that affect health and human services delivery from the standpoint of the individual, the public, and the system of providers. Through an overview of current law, regulation, standards of ethics, and moral theory, students will evaluate pervasive issues and dilemmas present in their field of study. This course incorporates case studies with philosophical and theoretical analysis to equip students with nuanced perspectives regarding the ethical, legal, and health policy challenges facing society.
Attributes: Writing Intensive Course
Equivalent(s): HLTC 629G, HMP 744
Grade Mode: Letter Grading

HLTC 695 - Internship or Project in Health Care
Credits: 4
This upper level course is a field-based experience designed to develop and hone the practical application skills of a health care, human services, or wellness-related major. Students apply for an internship at a self-selected site and negotiate the terms of the internship experience with a site supervisor under the auspices of their faculty internship mentor. The internship requires documented evidence of eighty hours of supervised experience and practice in a field setting where health care, human services, or wellness-related knowledge and skills are applied. A non-field-based project may be substituted with approval of Academic Affairs. NOTE: Registration for this course as an internship is by permission of Academic Affairs. Early registration deadlines may apply. All major requirements must be completed prior to enrollment in this course.
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): HLTC 640G
Grade Mode: Letter Grading

HLTC 720 - Health Program Planning and Evaluation
Credits: 4
This course addresses the principles of planning, development, implementation, and evaluation of health programs with an emphasis on addressing community health frameworks, individual health and lifestyle risk factors, and the appropriate interventions to manage these risks. Partnership building with stakeholders will also be addressed.
Prerequisite(s): MTH 504 with a minimum grade of D- or MATH 504G with a minimum grade of D-.
Equivalent(s): HLTC 620G
Grade Mode: Letter Grading

HLTC 737 - Informatics for Health Professionals
Credits: 4
Health care professionals interact with patients, families, communities, and populations in technology rich environments. This course provides students with the opportunity to explore communication technologies and informatics tools integral to the health care system. Students will investigate how data is collected and utilized to inform decisions. Consideration of the impacts of information and communication technologies relative to ethical standards, quality improvement, regulations, and the experience of patients and providers shall be explored by students.
Attributes: Writing Intensive Course
Prerequisite(s): NUR 615 with a minimum grade of D- or (MTH 504 with a minimum grade of D- and HLTC 612 with a minimum grade of D-).
Equivalent(s): HLTC 637G, NUR 608G
Grade Mode: Letter Grading

HLTC 738 - Health Care Policy
Credits: 4
This course explores the multifaceted issues affecting health care policy in the United States. The course reviews the history of health care policy and provides students with an understanding of how it has shaped our current health care delivery system. Major health care policies and initiatives are reviewed. The course also explores the many political challenges (state and national), political process, impact of the presidential administration, and political interest groups. Students examine the impact that various parties have on health care policy and the challenges facing reform efforts.
Prerequisite(s): HLTC 550 with a minimum grade of D- or HLTC 550G with a minimum grade of D-.
Equivalent(s): HLTC 638G, HMP 746
Grade Mode: Letter Grading

HLTC 795 - Integrative Capstone: Internship in Health and Wellness
Credits: 4
This upper level course is a field-based experience designed to develop and hone the practical application skills of a health care, or wellness-related major. Students apply for an internship at a self-selected site and negotiate the terms of the internship experience with a site supervisor under the auspices of their faculty internship mentor. The internship requires documented evidence of eighty hours of supervised experience and practice in a field setting where health care, or wellness-related knowledge and skills are applied. This course is the capstone for the BS in Health and Wellness. NOTE: Registration for this course as an internship is by permission of Academic Affairs. Early registration deadlines may apply. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): HLTC 651G
Grade Mode: Letter Grading

HLTC 797 - Integrative Capstone: Project in Health Care Management
Credits: 4
This project-based capstone integrative seminar focuses on the concepts and techniques of successful health care management practices. It analyzes the process of developing and executing strategies designed to optimize a health care organization and its management. Students apply their knowledge of health care systems, policy, financing, and information systems to a course project. The project integrates essential knowledge from the degree program at both the practical and the theoretical levels while fulfilling the student's own field of professional interest. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): HLTC 650G
Grade Mode: Letter Grading

HLTC 798 - Integrative Capstone: Project in Health and Wellness
Credits: 4
This capstone course requires students to integrate the knowledge and skills gained from other courses in the program and to demonstrate the ability to apply their knowledge to new subject matter and practical situations. Conforming to the clinical, research and ethical health standards, students will complete an independent project, which includes the written analysis and synthesis integrating theory and practice. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): HLTC 652G
Grade Mode: Letter Grading

Health Management & Policy (HMP)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HMP 401 - United States Health Care Systems
Credits: 4
Nature and functions of health care services and health professionals; impact of social, political, economic, ethical, professional, legal, and technological forces on health care systems. Current health policy issues.
Attributes: Social Science (Discovery)
Equivalent(s): HLTC 550, HMP 401H, HMP 401W
Grade Mode: Letter Grading

HMP 403 - Introduction to Public Health
Credits: 4
This course describes and defines "what is public health" and seeks to convey its critical importance and relevance to both public and individual (personal) wellbeing. It presents an overview of the structure, function, and organization of the public health system/services (government, proprietary, and voluntary sectors) and how they operate, emphasizing core functions and major divisions (public health administration, epidemiology and biostatistics, environmental health, social and behavioral health). Addresses the social, ethical, issues; bioterrorism; epidemics; obesity; tobacco, alcohol, and opioid use; violence. Seeks to challenge students to think critically about existing and emerging U.S. and global public health issues. Introduces public health careers.
Equivalent(s): HLTC 612
Grade Mode: Letter Grading

HMP 501 - Epidemiology and Community Medicine
Credits: 0 or 4
The distribution and determinants of disease, illness, and health in the community. Community health and illness measures, health status, and source of data. Development of hypotheses and study designs to reduce community health problems using epidemiological reasoning, methods, and analyses. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course
Equivalent(s): HAP 402, HAP 501, HMP 501H
Grade Mode: Letter Grading

HMP 512 - Using Data to Improve Human Health
Credits: 4
A digital revolution is transforming healthcare around the world. The amount of healthcare data being generated is growing exponentially by the day, facilitated by technology, such as Electronic Health Records and wearable health devices. Advances in software for mining, analyzing, and visualizing data are allowing researchers to unveil unprecedented insights. This course explores the role of data in advancing human health. Through a multidisciplinary approach, students will examine the collection, analysis, and ethical implications of health-related data. The course aims to foster critical thinking skills and an understanding of the interplay between technology and society in the context of healthcare.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

HMP 540 - Statistics for Health and Human Service Professionals
Credits: 4
A conceptual and analytical approach to the use of statistics in the health and human service professions. Emphasizes the logic and purpose of statistics. Attention to special problems of statistical design such as random assignment, single subject trials, and the ethics of control groups. Basic computer skills for manipulating data.
Attributes: Quantitative Reasoning(Disc)
Equivalent(s): HHS 540
Mutual Exclusion: No credit for students who have taken ADMN 420, ADMN 510, BIOL 528, EREC 525, MATH 439, MATH 539, MATH 644, PSYC 402, PSYC 402H, SOC 402, SOC 402H, SOC 502, SOC 502H.
Grade Mode: Letter Grading

HMP 610 - Survey of Health Information Systems
Credits: 2
This course introduces you to the nomenclature and foundations of health information technology and systems in health care delivery settings and the management and strategic uses for those systems. It is relevant for those studying health care management and individuals using or installing clinical health information systems. Time will be spent examining health care information flow, data capture, storage within information systems, technology standards, information security, and data usages both internally and externally.
Prerequisite(s): HMP 401 with a minimum grade of D-.
Equivalent(s): HMP 511, HMP 611
Grade Mode: Letter Grading

HMP 621 - Pre-practicum Seminar
Credits: 1-2
Preparation for field practicum experience, orientation to experiential learning and competency development.
Repeat Rule: May be repeated for a maximum of 2 credits. May be repeated up to 1 time.
Equivalent(s): HAP 621
Grade Mode: Letter Grading

HMP 622 - Field Practicum in Organizational and Project Analysis, and Management Skills Development
Credits: 3
Experiential learning in a health care organization; application of theories to practice. Planned learning objectives are accomplished through three distinct components. Organizational Analysis, Project Analysis and Management Skills Development, with Supervision by agency personnel. This will include analysis of assigned health care agency, from external and internal viewpoints, development of the basic quantitative and interpersonal skills required for a health services manager, and demonstration of knowledge and analysis of specific problem-solving skills. Students need a GPA of 3.0 or higher, and an approved practicum site.
Prerequisite(s): HMP 621 with a minimum grade of D-.
Equivalent(s): HAP 622, HMP 622A, HMP 622B, HMP 622C
Grade Mode: Credit/Fail Grading

HMP 624 - Post Practicum Seminar
Credits: 2
Summary of field practicum experience, and next steps. Individual analysis and panel discussions to include site assessment, project description, and methodologies employed, critique of individual skills, and knowledge base in relation to internship.
Prerequisite(s): HMP 621 with a minimum grade of D-.
Grade Mode: Letter Grading

HMP 631 - Health Issues Seminar
Credits: 2
Discussion of current issues in the fields of health management, health policy and public health.
Grade Mode: Letter Grading

HMP 635 - Healthcare Marketing
Credits: 4
Healthcare marketing builds upon competencies from previous courses, it covers foundational marketing principles, their application in healthcare administration, including marketing strategy, strengths and weakness evaluation, environmental forces, competitors, market size, customer/patient stratification and needs by defined groups, products and services, promotion, distribution, evaluation, and communication channels used to launch a targeted approach to different segmentations. Groups will choose a topic (new service, expansion or social marketing/public health topic) for full marketing launch presentations.
Grade Mode: Letter Grading

HMP 642 - Health Economics
Credits: 4
This course in health economics introduces the tools of microeconomics to analyze various issues in health and healthcare. The first half of the course focuses on patient demand, and the second half focuses on provider supply. Topics covered in the former include the demand for health and healthcare, the demand for insurance, externalities associated with certain health behaviors, cost-effectiveness analyses, and health equity considerations. Topics covered in the latter half of the course include the role of nonprofits, provider agency, provider competition versus concentration, insurer behavior, and the effects of government regulation of insurance.
Grade Mode: Letter Grading

HMP 669 - Human Behavior and the Public Health
Credits: 4
Provides a grounding in fundamental concepts of the behavioral sciences as they illuminate public health. Individual and community responses to prevention, identification of symptoms, diagnoses, treatments, chronic ailments, and rehabilitation are discussed. In each of these areas, the course explores the interaction between community, family, patient, and health care provider.
Equivalent(s): HMP 569
Grade Mode: Letter Grading

HMP 702 - Programming in Healthcare Environments
Credits: 4
This course covers using Python as a programming language to write, implement, and design programs that are relevant to various aspects of programming in a health setting. After completion of this course, students should be comfortable with the basic data structures in Python and R (including arrays, dictionaries and dataframes), conditional logic and iterators, writing Python and R functions, and using Python libraries to read external data and perform data manipulations and data analysis.
Grade Mode: Letter Grading

HMP 703 - Translation of Health Data
Credits: 4
This course will give you the skills you need to leverage data to reveal valuable insights and advance your career. This course teaches you the visualization skills necessary to be effective Data Storytellers which helps engage your audience in a story about the data. This course focuses on concepts as well as hands#on experience of presenting data from initial concepts to final presentation by creating meaningful displays of quantitative and qualitative data to facilitate peer/managerial decision making.
Grade Mode: Letter Grading

HMP 711 - Introduction to Healthcare Operations Analytics
Credits: 4
Introduces intermediate techniques for data manipulation and analysis for the health care field. Also introduces methods for survey research and large data set manipulation and analysis. There is a lab section utilizing a statistical software package where students perform tasks from a large national data set.
Grade Mode: Letter Grading

HMP 712 - Healthcare Operations Management
Credits: 4
This course introduces students to the field of health analytics and data science. It expands upon introductory statistical and data manipulation methods to include data mining, predictive analytics, cluster analysis, trend and pattern recognition, and data visualization. It couples data skills with interpretive and communication skills. Students will also be exposed to basic statistical programming. There will be a graduate component of the course (812) where students will work on advanced concepts and complete a separate culminating project.
Prerequisite(s): HMP 711 with a minimum grade of D-.
Grade Mode: Letter Grading

HMP 715 - Environmental Health
Credits: 4
This course offers a general introduction to environmental health from the community, regional, and global perspective by addressing fundamental topics and current controversies such as air pollution, water pollution, built environment/urban sprawl, food safety, waste disposal, and occupational health. Students learn about environmental health assessment methods. Major issues in environmental health and related regulatory efforts and public health policy reform are examined.
Grade Mode: Letter Grading

HMP 721 - Managing Health Care Organizations
Credits: 4
Organizational characteristics of ambulatory, acute, and long-term care facilities. Management issues and strategies involving governance, clinical services, human and fiscal resources, and community-based services.
Grade Mode: Letter Grading

HMP 722 - Health Care Management II
Credits: 4
A continuation of HMP 721 - Managing Health Care Organizations with specific lectures and assignments devoted to organizational behavior, leadership, and managerial skills. Case studies and examples will relate specifically to health care organizations.
Prerequisite(s): HMP 721 with a minimum grade of D-.
Grade Mode: Letter Grading

HMP 723 - Health Planning
Credits: 4
Theoretical and historical foundations of health planning; the relationship of health planning and regulation; the application of planning methods; and the utilization of strategic planning and its relationships to marketing.
Equivalent(s): HAP 723
Grade Mode: Letter Grading

HMP 740 - Health Care Financial Management
Credits: 4
Techniques, principles, and practices of managing fiscal aspects of health care organizations. Exploration of concepts and techniques associated with variance analysis, cost allocation, management of working capital, and capital decision analysis. Analysis of the impact of reimbursement on health care organizations.
Equivalent(s): HLTC 627
Grade Mode: Letter Grading

HMP 741 - Health Care Financial Management II
Credits: 4
This course focuses on issues related to effective financial management of health care organizations and programs, building upon material covered in HMP 740, Health Care Financial Management. Topics include the time value of money, long-term debt, stocks and equity, and evaluation of capital projects.
Prerequisite(s): HMP 740 with a minimum grade of D-.
Equivalent(s): HLTC 627
Grade Mode: Letter Grading
Special Fee: Yes

HMP 742 - Strategic Management for Health Care Organizations
Credits: 4
Application of managerial methods involving financial, marketing, and operational analysis to health management. Case studies.
Attributes: Writing Intensive Course
Prerequisite(s): HMP 721 with a minimum grade of D- and HMP 740 with a minimum grade of D-.
Equivalent(s): HAP 742
Grade Mode: Letter Grading

HMP 744 - Law and Ethics in Healthcare
Credits: 4
Ethical theories, core legal principles and cases, and decision-making models; patient's rights and professional responsibilities; social justice and resource allocation; critical ethical dilemma's facing health care managers, policy makers, and executives; managerial versus medical care conflicts.
Equivalent(s): HLTC 690
Grade Mode: Letter Grading

HMP 746 - Health Policy
Credits: 4
Analysis of the public policy process, the development of health policies in the U.S., and discussion of specific health policy issues.
Attributes: Writing Intensive Course
Equivalent(s): HLTC 738
Grade Mode: Letter Grading

HMP 749 - Public Health Capstone: Integrative Experience
Credits: 4
The Capstone course is the culminating experience for students in the Bachelor of Public Health (BPH) program. This course integrates knowledge and skills acquired throughout the program, allowing students to apply public health theories, methods, and practices to real-world public health problems. Students will work on a community-based project, research paper, or case study to demonstrate their competencies in public health practice, research, and policy development.
Grade Mode: Letter Grading

HMP 796 - Independent Study
Credits: 1-4
In-depth study with faculty supervision.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

HMP 798H - Honors Project/Research Design
Credits: 2
Examines selected research designs and methods used in health services research/program evaluation. Establishes theoretical and methodological foundation for honors-in-major research project to be conducted during the subsequent semester under a faculty member's supervision.
Attributes: Honors course
Grade Mode: Letter Grading

HMP 799H - Honors Project/Research
Credits: 2-4
In-depth research project (conducting and analysis) under supervision of faculty member. Includes scholarly presentation of findings to faculty and other interested parties and preparation of manuscript suitable for publication in peer-viewed journal.
Attributes: Honors course; Writing Intensive Course
Prerequisite(s): HMP 798H with a minimum grade of D-.
Grade Mode: Letter Grading

Health Sciences (HS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HS 406 - Introduction to Health Sciences
Credits: 1
This introductory course is designed to expose students to the broad, interdisciplinary field of health sciences. It will provide students an overview of the prerequisite knowledge that will prepare an individual to pursue a career in any number of allied health professions. In this course, students will explore basic foundational concepts pertinent to a complex, ever-evolving healthcare field.
Equivalent(s): AT 406
Grade Mode: Letter Grading

HS 501 - Medical Terminology
Credits: 2
This course is an introduction to common medical terminology and vocabulary used by a variety of professionals in the healthcare field; terminology related to organ systems, disease diagnosis and pathophysiology will be emphasized. The origin, roots, prefixes, suffixes, and relevant abbreviations and acronyms of common medical and clinical terms are examined in a systems-based approach.
Grade Mode: Letter Grading

HS 605 - Exploration of Allied Health Professions
Credits: 2
Explore and understand duties, responsibilities, and common work schedules of allied health professions. Complete 10 hours of observation with each profession: athletic training, physical therapy, and physician assistant. Students may substitute observation of other professions by submitting written justification to, and upon permission of course instructor.
Grade Mode: Credit/Fail Grading

HS 656 - Musculoskeletal Pathologies for Health Professions
Credits: 4
Introduces the student to the musculoskeletal injuries common to allied health professions. Cognitive knowledge on anatomy, injury pathology, assessment and diagnosis. In conjunction with HS 657, Musculoskeletal Pathologies for Health Professions Lab, this course prepares the student for continued education in allied health professions.
Co-requisite: HS 657
Prerequisite(s): BMS 507 with a minimum grade of C- and BMS 508 with a minimum grade of C-.
Grade Mode: Letter Grading

HS 657 - Musculoskeletal Pathologies for Health Professions Lab
Credits: 1
The practical application of the knowledge attaining in HS 656. Students will learn & perform anatomical landmark palpation, injury assessment procedures & techniques, and taping & wrapping procedures. This course, in conjunction with HS 656, prepares the students for further education at the graduate level.
Co-requisite: HS 656
Prerequisite(s): BMS 507 with a minimum grade of C- and BMS 508 with a minimum grade of C-.
Grade Mode: Letter Grading
Special Fee: Yes

HS 696 - Independent Study
Credits: 2-4
An advanced, individual scholarly project under the direct supervision of a faculty member.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

HS 699H - Honors Project
Credits: 4
Project first involves tutorial sessions to introduce the student to the experimental design, after which a research question is developed. After an appropriate literature review, the student collects and analyzes data, forms conclusions, and prepares a written report on the findings.
Attributes: Honors course
Grade Mode: Letter Grading

HS 702 - From Lab to Life: Interpretation of Research to Guide Clinical Practice
Credits: 4
This course equips students with the skills to advance clinical practice through evidence-based and translational research. Topics include differentiating research types, utilizing database search strategies, and navigating the research journey. Ethical considerations, including the use of AI and research integrity, are emphasized. Students will critically analyze research articles, develop innovative solutions for health and wellness, explore career opportunities in clinical research, and assess disparities in health outcomes among underrepresented populations.
Grade Mode: Letter Grading

HS 717 - Cultural Considerations in Health Care
Credits: 4
Capstone course to introduce concepts of culture, cultural humility, and diversity as related to professional practice for students preparing for careers in healthcare professions. Patient-centered course teaching students about patient types, and how to appropriately consider and care for those with differing cultural backgrounds, beliefs and practices.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 10 credits.
Grade Mode: Letter Grading

HS 741 - The Art and Science of Healthcare Practice: Integrating Clinical Knowledge with Professional Skills
Credits: 4
Explore concepts of effective healthcare practice, including professionalism, communication skills, clinical reasoning, and interprofessional collaboration. Develop essential skills for navigating healthcare practice, enhancing patient care, and working collaboratively with diverse healthcare teams. Practical exercises provide students with the opportunity to apply theoretical knowledge in realistic settings. Students develop a strong understanding of how to contribute effectively to interprofessional teams in delivering high-quality, patient-centered care.
Grade Mode: Letter Grading
Special Fee: Yes

HS 767 - Pharmacology for Health Professions
Credits: 4
This course will be an introduction to the general principles of pharmacology, the organ systems affected by the various drug types, and drug classifications as appropriate for future allied health professionals. Students will also explore common prescribing in various practice settings as well as the applicable U.S. laws relative to the sale, supply, and administration of drugs.
Prerequisite(s): CHEM 403 with a minimum grade of C- and CHEM 404 with a minimum grade of C-.
Equivalent(s): AT 667, KIN 667
Grade Mode: Letter Grading

HS 770 - General Medical Conditions for Health Professions
Credits: 4
This course will be an introduction to the general medical conditions commonly diagnosed and treated among allied health professionals, with emphasis on disease etiology, pathophysiology, signs and symptoms, diagnostic procedures, and therapeutic measures involved in treatment.
Prerequisite(s): BMS 507 with a minimum grade of C- and BMS 508 with a minimum grade of C-.
Equivalent(s): AT 670
Grade Mode: Letter Grading

History (HIS) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HIS 402 - Great Civilizations
Credits: 4
For thousands of years, humans have created communities that align with certain perceived value systems. From these value systems, great civilizations have been cultivated, developed, and brought into conflict with other cultures. This course examines the rise of civilizations throughout the world, tracing the history of human societies from their beginnings through 1000 C.E. After surveying the prehistoric period and early civilization, the course focuses on the religious, political, and cultural characteristics of key civilizations from around the world. Emphasis will be placed on patterns of civilization, human conflict and interaction, and the development of human thought and expression.
Attributes: Historical Perspectives(Disc); Human Thought Exp (Gen Ed)
Equivalent(s): HIS 502G
Mutual Exclusion: No credit for students who have taken HIST 421.
Grade Mode: Letter Grading

HIS 410 - United States History to 1865
Credits: 4
This course focuses on the origins and development of issues relevant to Americans today through the examination of the history of the United States from its earliest settlement through the Civil War. Students study themes and events ranging from Native American cultures and their contact with early European settlements, the triumph of British over French and Spanish settlers, the upheavals of the Revolution, the establishment of the United States, its expansion westward, and the development and growth of slavery which culminated in the Civil War. The focus of this class will be making connections between the past and the present day, recognizing historical themes, evaluating areas of conflict, and using evidence-based historical interpretation.
Attributes: Historical Perspectives(Disc); Human Thought Exp (Gen Ed)
Equivalent(s): HIS 510G
Mutual Exclusion: No credit for students who have taken HIST 405.
Grade Mode: Letter Grading

HIS 411 - United States History: 1865 to the Present
Credits: 4
This course addresses the characteristics of contemporary American society as a product of major developments, policies, conflicts, and legislation that occurred from 1865 to the present. Major topics include: reconstruction after the Civil War, industrialization and its consequences, themes and patterns of American foreign policy, the Progressive era and the New Deal, World War II, the Cold War, America's role in the era of globalism, and domestic and foreign policy developments since World War II. Students will have the opportunity to use primary and secondary sources to explore multiple perspectives and interpretations of this period in history.
Attributes: Historical Perspectives(Disc); Human Thought Exp (Gen Ed)
Equivalent(s): HIS 511G
Mutual Exclusion: No credit for students who have taken HIST 406.
Grade Mode: Letter Grading

HIS 512 - European History: Renaissance through the Industrial Revolution
Credits: 4
This course provides students the opportunity to engage in critical discussions about the foundations of modern western society according to key cultural, religious, and political changes associated with the Renaissance, the Reformation, and the emergence of the modern state. It also examines developments in the sciences, western philosophy, and revolutionary politics in theory and practice, through the nineteenth century, drawing connections between the past and the present day.
Attributes: Human Thought Exp (Gen Ed)
Equivalent(s): HIS 512G
Grade Mode: Letter Grading

HIS 590 - Historical Methods
Credits: 4
In this course, students develop and employ historical methodology appropriate to the study of events, figures, periods, and cultures of the past. Building on General Education coursework in thinking, research, and writing, the course helps to develop a historical mindset through student practice with methods and processes of the historian, in designing viable projects to explore further, and in substantive written work. The course frames key questions and concepts in the discipline and prepares students for upper-level courses in the major.
Attributes: Human Thought Exp (Gen Ed); Writing Intensive Course
Prerequisite(s): (ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-) and (CRIT 501 with a minimum grade of D- or CRIT 501G with a minimum grade of D-).
Equivalent(s): HIS 610G
Grade Mode: Letter Grading

HIS 602 - History of New England
Credits: 4
The course is a survey of New England's history spanning a time period from the late 1600's to the present. Students will assess New England's role in the economic, political, and military history of our nation. In addition, there is a focus on local New England communities and the important historical events and forces that contributed to their development.
Attributes: Human Thought Exp (Gen Ed); Writing Intensive Course
Equivalent(s): HIS 602G
Grade Mode: Letter Grading

HIS 611 - Themes in World History
Credits: 4
This course examines the political, social, economic, and cultural forces that shaped the development of world civilizations from 1000 CE to the present. The focus of study will move beyond basic geography and historic timelines to ask questions about cultural interactions, conflict, and the varying forces that impacted world history, as well as to evaluate interpretations of the past. Using both primary and secondary sources, students will critically examine connections and patterns of history with a particular focus on globalism, multiculturalism, nationalism, and religious conflict throughout Europe, Africa, Asia, and the Americas.
Attributes: Historical Perspectives(Disc); Human Thought Exp (Gen Ed); Writing Intensive Course
Equivalent(s): HIS 611G
Grade Mode: Letter Grading

HIS 718 - History of World War II
Credits: 4
This course explores the causes and consequences of the Second World War from a global perspective. It explores the rise of nationalism and totalitarianism and the impact of colonialism. The course explores the causes of WWI and its aftermath, moves through the decade of the 20's to the Depression and the rise of fascism, to the onset of the war in Europe, Africa, and the Pacific, and finally to the peace agreements and their effect on the future of the world. In particular it looks at industrial, agricultural, and democratic developments and their impact on the war. Military mobilization, gender, race, notions of "the good war," and cultural conflict will also be studied.
Attributes: Historical Perspectives(Disc); Human Thought Exp (Gen Ed)
Equivalent(s): HIS 618G
Grade Mode: Letter Grading

HIS 727 - Vietnam War: An Historical Perspective
Credits: 4
Students will have the opportunity to examine three decades of struggle in Southeast Asia beginning with the history of French Colonial Indochina that led Communist Vietnamese revolutionaries into conflict with France, and then the United States and its Vietnamese allies. The course presents primary sources to examine the impact and significance of the war on American society and to evaluate its causes and consequences. The complexities of the lived human experiences before, during, and after the Vietnam War are studied according to a multitude of perspectives and interpretations.
Attributes: Human Thought Exp (Gen Ed)
Equivalent(s): HIS 627G
Grade Mode: Letter Grading

HIS 795 - Integrative Capstone: Internship in History
Credits: 4
This capstone course is a field-based internship designed to develop and hone the practical application skills of a History major. The course requires students to integrate the knowledge and skills gained from other courses in the program and to demonstrate the ability to apply their knowledge to new subject matter and practical situations. Students apply for an internship at a self-selected site and negotiate the terms of the internship experience with a site supervisor under the auspices of their faculty mentor. The internship requires documented evidence of eighty hours of supervised experience and practice in a field setting where history-related knowledge and skills are applied. Students will complete a substantial, evidence- based research paper or project related to their internship work. NOTE: Registration for this course, an internship, is by permission of Academic Affairs. Early registration deadlines may apply. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): HIS 651G
Grade Mode: Letter Grading

HIS 797 - Integrative: Project in History
Credits: 4
This capstone course for History majors is designed to integrate learning from the entire major in an individually-customized project. Students demonstrate competency in history by producing an assessment of prior historical study (historiography) and a substantive original essay based on in-depth research. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): HIS 660G
Grade Mode: Letter Grading

History (HIST)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HIST 403 - Introduction to Greek Civilization
Credits: 4
A broad historical exploration of Greek civilization. Topics include: architecture, art, law, literature, philosophy, poetry, politics, religion, society, warfare, and the Greek's legacy to the modern world. Open to all students. No prior knowledge of the ancient world assumed; all readings are in English. Ideal background for students of English, philosophy, history, Latin, Greek, the arts, music, modern languages.
Attributes: Historical Perspectives(Disc)
Equivalent(s): CLAS 403, CLAS 405
Grade Mode: Letter Grading

HIST 404 - Introduction to Roman Civilization
Credits: 4
A broad historical exploration of Roman civilization. Topics include: architecture, art, law, literature, philosophy, poetry, politics, religion, society, warfare, and their legacy to the modern worlds. Open to all students. No prior knowledge of the ancient world assumed; all readings are in English. Ideal background for students of English, philosophy, history, Latin, Greek, the arts, music, modern languages.
Attributes: Historical Perspectives(Disc)
Equivalent(s): CLAS 404, CLAS 406
Grade Mode: Letter Grading

HIST 405 - History of Early America
Credits: 4
America from the early era of European discovery through the American Civil War. Emphasizes the interaction of European, Native American, and African peoples; the separation of the English colonies from Great Britain; and the establishment and early history of the United States. Course meets the History major requirement for Group 1.
Attributes: Historical Perspectives(Disc)
Equivalent(s): HIST 405H, HIST 405W
Mutual Exclusion: No credit for students who have taken HIS 410.
Grade Mode: Letter Grading

HIST 405W - History of Early America
Credits: 4
America from the early era of European discovery through the American Civil War. Emphasizes the interaction of European, Native American, and African peoples; the separation of the English colonies from Great Britain; and the establishment and early history of the United States. Course meets the History major requirement for Group 1.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Equivalent(s): HIST 405, HIST 405H
Grade Mode: Letter Grading

HIST 406 - History of the Modern United States
Credits: 4
History of the United States since the mid-19th century. Political, social, and economic developments as well as relationships of the modern U.S. with other countries. Course meets the History major requirement for Group 1.
Attributes: Historical Perspectives(Disc)
Equivalent(s): HIST 406H, HIST 406W
Mutual Exclusion: No credit for students who have taken HIS 411.
Grade Mode: Letter Grading

HIST 410 - Historic Survey of American Civilization
Credits: 4
Topical survey, within broad chronological divisions, of the development of American civilization since 1600. Students may take the course up to two times as long as the topic for the two courses is different. Course meets the History major requirement for Group 1.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): HIST 410H
Grade Mode: Letter Grading

HIST 421 - World History to the 16th Century
Credits: 4
The global experience of human communities with special emphasis on the development of the major civilizations and their interactions. Comparisons of social, cultural, religious, and political life and the emergence of distinctive and diverse human societies are examined. Course meets the History major requirement for Group III.
Attributes: Historical Perspectives(Disc)
Mutual Exclusion: No credit for students who have taken HIS 402.
Grade Mode: Letter Grading

HIST 422 - World History in the Modern Era
Credits: 4
Emergence of major global human interactions due to the growth of major civilizations. The global context for the rise of the modern West. The rise and decline of Western global domination and the emergence of new states and changing societies throughout the world. Course meets the History major requirement for Group III.
Attributes: Historical Perspectives(Disc)
Equivalent(s): HIST 422H
Grade Mode: Letter Grading

HIST 425 - Foreign Cultures
Credits: 4
Introduces the culture of a particular nation or region; preparation for experiencing a foreign culture. Consult department for listing of topics. Course meets the History major requirement for Group II or III, depending on the topic.
Attributes: World Cultures(Discovery)
Equivalent(s): HIST 425H, HIST 425W
Grade Mode: Letter Grading

HIST 436 - Europe and the Modern World
Credits: 4
The course focuses on major encounters between Europe and its Global rivals from the Age of the Revolution to the rise of modern terrorism. While the topics covered will vary by instructor, all sections address the rise of Democracy, the birth of Capitalism, the apocalyptic destruction of the two World Wars, and the emergence of a diverse multi-cultural Europe in the years following World War II. Course meets the History major requirements for Group II.
Attributes: Historical Perspectives(Disc)
Equivalent(s): HIST 436H, HIST 436W
Grade Mode: Letter Grading

HIST 436W - Europe and the Modern World
Credits: 4
The course focuses on major encounters between Europe and its Global rivals from the Age of the Revolution to the rise of modern terrorism. While the topics covered will vary by instructor, all sections address the rise of Democracy, the birth of Capitalism, the apocalyptic destruction of the two World Wars, and the emergence of a diverse multi-cultural Europe in the years following World War II. Course meets the History major requirements for Group II.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Equivalent(s): HIST 436, HIST 436H
Grade Mode: Letter Grading

HIST 437H - Honors/The Mad Among Us: A Global History of Mental Disorder
Credits: 4
Mental disorder is a universal and persistent condition in human history. Every society has struggled to make sense of it; every society has struggled to address it. But, what is mental disorder? Is it a disease? If so, of what? The body? The brain? The soul? Is it a chemical imbalance? Genetic destiny? Is it the wage of sin? The mark of the devil? The curse of a god? Or is it a social label or cultural construct - a name slapped on thought, feeling, or behavior that defies a society's definition of "normal?" This course seeks to answer these questions by exploring the great range of beliefs human societies, ancient to modern and from across the globe, have developed to identify and define mental disorder as well as the methods they have employed to treat or contain it.
Attributes: Historical Perspectives(Disc); Honors course
Grade Mode: Letter Grading

HIST 440A - Martin Luther King, Jr., and the Struggle for Racial Justice
Credits: 4
This course examines Martin Luther King's life, philosophy, and career on the front lines of the civil rights movement. In our study of King as well as the larger black freedom struggle, we seek an understanding of how certain questions related to racial justice played out in American history. We focus on issues of civil disobedience, just and unjust laws, love and hate, violence and non-violence. Students will read many of King's famous writings such as the Letter from Birmingham Jail, as well as his lesser-known speeches - among them king's 1967 address denouncing the Vietnam War. More generally, this seminar introduces students to the rudiments of historical thinking and asks broader questions about the role of individuals in history and how social change happens. Course meets the History major requirement for Group I.
Attributes: Historical Perspectives(Disc); Honors course
Grade Mode: Letter Grading

HIST 440D - Honors/Citizens and Persons
Credits: 4
Definitions of citizenship have changed dramatically in the course of history. In this class, we will trace the evolution of expanding (and occasionally contracting) political and civil rights and responsibilities over time, with an emphasis on events in multicultural American nations and emphasizing how laws, social practices, unique historical contexts, and individuals' understanding of self and other have mutually produced each other. The course is part of the Honors Symposium "Being Human" and will engage in an interdisciplinary conversation about personhood, humanity, rights and responsibilities, and dehumanization.
Attributes: Historical Perspectives(Disc); Honors course
Grade Mode: Letter Grading

HIST 440E - Honors/Drugs and Addiction in World History
Credits: 4
As drug addiction rates in the US are reaching epidemic proportions, new solutions and perspectives are becoming increasingly important. This course teaches students how a variety of cultures, including the Aztecs, Maya, Vedic India, China, and Greco-Roman antiquity, confronted the problems of drug use and addiction in their own societies. By examining these phenomena through the lens of other culture's values, students will gain a valuable perspective by which to address these problems today.
Attributes: Honors course; World Cultures(Discovery)
Grade Mode: Letter Grading

HIST 440F - Honors/Islam, Art, and the Past
Credits: 4
While the world is all too familiar with images of ISIS using explosives and frills to destroy ancient sites and artifacts in Iraq and Syria, there has been little attention given to the dynamic role of art within past and present Islamic societies. Yet, Islam has a rich and vibrant artistic tradition, one in which ancient civilizations played and continue to play a major role. This course introduces students to Islamic art and cultural heritage through a study of Islam's engagement with past artistic traditions in the fields of architecture and the fine arts. It also addresses how the recent actions of ISIS have changed questions about cultural heritage and stewardship in the Middle East and the West. Finally, the course asks students what they can and should do to preserve cultural heritage.
Attributes: FinePerformingArts(Discovery); Honors course
Grade Mode: Letter Grading

HIST 440J - Capitalism and Inequality in World History
Credits: 4
This course introduces students to the causes of wealth inequality in the broadest possible variety of well-documented societies throughout world history, especially how capitalism causes and increases the gap between rich and poor. Ancient Greece, Rome, and China will be studied in depth, culminating in Industrial Capitalism from nineteenth-century Britain to twenty-first century US. State solutions to recurring patterns of free market profit-maximization (debt forgiveness, taxation, wealth distribution) are explored from ancient Mesopotamia to today. Cannot earn credit if credit received for HIST 690 "Rich vs. Poor: Class Welfare in World History".
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

HIST 444H - Honors/From Beijing to Baghdad: Objects along the Silk Road
Credits: 4
The Silk Road, often characterized as the world's first great superhighway, played a vital role in spreading forms of art and in developing new technologies for their production. The peoples along the Silk Road traded luxury goods such as silk and jade as well as culinary and musical traditions. Through lectures, readings, films, and podcasts we will explore the trade links between East and West and the material objects traded along the way.
Attributes: FinePerformingArts(Discovery); Honors course; Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

HIST 444J - Honors/Global Citizenship: In Pursuit of Liberty
Credits: 4
What does it mean to be a global citizen? Are we? What are human rights? Are they universal? This honors discovery course will explore with the men and women who traveled and thought beyond the borders of their locality and their moment of time and who imagined themselves citizens of the world. We will start with early revolutions that traversed oceans and national borders. We'll read utopias that saw their world differently. In the end, we will investigate major global challenges of our own world. We will move backwards, but also forwards in history. We will read novels, and perform plays. We will listen to Beethoven and Berlioz, in class and discuss larger questions of our international community, from sustainability to diversity, as they echo through different disciplines. Course meets History major requirement for Group I or II.
Attributes: Historical Perspectives(Disc); Honors course; Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

HIST 483 - History of World Religions
Credits: 4
Introduces the religions of the world in terms of historical development, relationship to society, belief system, central texts, and ritual practices. Begins with the religions of small and tribal societies (e.g., African, Native American), moves through religions of complex societies (e.g., Hinduism), and then studies the various traditions that emanated from ancient revelations: Zoroastrianism, Buddhism, Judaism, Christianity, Islam, and certain new forms of Christianity. Course meets History major requirement for Group III.
Attributes: Historical Perspectives(Disc)
Equivalent(s): HIST 483W, RS 483, RS 483W
Grade Mode: Letter Grading

HIST 497 - Explorations in Historical Perspectives
Credits: 4
In-depth exploration of a particular historical question or topic: for example, the French Revolution, Chaucer's England, or the New Deal. Students should consult with the Department of History for a list of topics and instructors. Course meets the History major requirements for Group I, II, or III, depending on the topic.
Attributes: Historical Perspectives(Disc)
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): HIST 497H, HIST 497W
Grade Mode: Letter Grading

HIST 498 - Explorations of Historical Perspectives
Credits: 4
In-depth exploration of a particular historical question or topic: for example, the French Revolution, Chaucer's England, or the New Deal. Students should consult with the Department of History for a list of topics and instructors. Course meets the History major requirements for Group I, II, or III, depending on the topic.
Attributes: Historical Perspectives(Disc)
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

HIST 500 - Introduction to Historical Thinking
Credits: 4
Basic skills essential to the study of history: critical reading of historical literature, improvement of written and oral analysis of historical material, and use of library resources. Intensive study of books and documents from varying historical fields and periods. Required of history majors; open to other interested students.
Attributes: Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

HIST 501 - Medieval Military History
Credits: 4
Western societies from the Roman Empire to the emerging nation states of early modern Europe spent an enormous proportion of their surplus wealth on war. This course introduces this crucial aspect of Western history and examines the period extending from the third century AD, to just before the extensive introduction into Europe of gunpowder weapons in the fifteenth century. Discussion of not only battlefield tactics and famous generals but also the effect that war had upon society as a whole and the economic ramifications of war, the Christianization of war, and the effect of war upon literature. Course meets the History major requirements for Group II.
Grade Mode: Letter Grading

HIST 505 - African American History
Credits: 4
Explores the forced integration of the Atlantic World through the African slave trade and the development of creole cultures in America, and takes the story of Black Americans' "creative survival" and the evolution of African-American culture through the end of the Civil War. Course meets the History major requirements for Group I.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Grade Mode: Letter Grading

HIST 509 - Law in American Life
Credits: 4
Investigates the role of law in American social, political, and economic life from the European settlements to the present. Traces the development of legal institutions, but focuses on the various functions of law (e.g., in structuring social relationships, allocating resources, defining governmental authority, expressing social and moral values, and as a mechanism for control). Course meets the History major requirements for Group I.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Grade Mode: Letter Grading

HIST 511 - History of New Hampshire
Credits: 4
This course reconstructs the surprising past of the place we call New Hampshire. Beginning with the 17th -century encounter between English and Native people, it runs to the present. Literature, documents, photos and films provide access to New Hampshire's changing natural environment, its rural life, industrialization, politics and recent struggles. Course meets the History major requirements for Group I.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Grade Mode: Letter Grading

HIST 520 - History of Animals
Credits: 4
Do animals have histories? Animals have created few if any written sources. Nevertheless, relationships between humans and animals have changed dramatically from the ancient past to the present day. Humans have shaped animal lives to serve many purposes; simultaneously, animals have served as agents of change in human history. Drawing on environmental, economic, social, and cultural history, this course will focus on the history of animals as pests, pets, producers, and products.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

HIST 522 - Science in the Modern World
Credits: 4
Development of science, particularly in Europe and North America, from the 18th century to the present. Themes including Darwinism, the growth of modern physical and biological sciences and science in the contemporary world. No special science background is required. Course meets the History major requirements for Group II.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

HIST 525 - Explorations in History & Humanities
Credits: 4
In-depth exploration of a particular question or topic that illustrates the intersection of History and Culture -- particularly as it produces or shapes Humanistic engagement with the past: for example "Cultural Memory of War," "Nationalism and Identity," "The Myth of the 'Lost Cause,'" African Oral Traditions," "Representations of the Holocaust in History & Film," or "The History of Memory." Students discover that cultural representations shape historical events and that history itself produces cultural, philosophic, and ideological outcomes that profoundly affect human engagement with past and present experiences. Students should consult with the Department of History for a list of topics and instructors. Course meets History major requirements for Group I, II, or III, depending on the topic.
Attributes: Humanities(Disc)
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

HIST 532 - Modern Latin America
Credits: 4
Provides a broad overview of Latin America from the 18th century to the present. It examines the breakdown of colonial rules, the establishment of independent countries, the formation of viable nation states, the importance of geography, the roles of the different elements of society. Social, political, and economic changes and continuities emphasized to give a sense of the ambiguities of the historical process. Cultural differences illustrated with slides and music. The effects of elite rule and of United States interventions studied. Course meets the History major requirements for Group III.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Grade Mode: Letter Grading

HIST 537 - Espionage and History
Credits: 4
Introduces the history and politics of espionage and intelligence organizations from the 20th century to the present. Special attention to intelligence work among the major powers in World War I, World War II, and the Cold War. Readings include autobiographical accounts and other primary sources as well as novels. Course meets the History major requirements for Group II.
Grade Mode: Letter Grading

HIST 538 - Modern European War and Society: The Napoleonic Wars to World War II
Credits: 4
This course is organized around three conflicts: the Napoleonic Wars, World War I, and World War II. As we study them, we'll discuss the evolution and impact of total war in order to understand how societies work in wartime and how these conflicts have shaped Europe. In our exploration of each war, we examine a range of participants from international alliances to individual soldiers and to civilians involved in the conflict. Total war, by its nature, incorporates most elements of society, so we will spend time looking at the homefronts as well as the battlefronts. We will survey the conflicts as a whole, but also devote time to some special events or elements. For example, we will look at the battle of Somme during the portion of the course dedicated to World War I. We will also study some of the art that arose out of the conflict. The core of the class will be lectures, but we will engage in some discussion almost every day and there are some classes that will be dedicated to discussion. Course meets the History major requirements for Group II.
Grade Mode: Letter Grading

HIST 547 - Introduction to Russian History: Russia and the World
Credits: 4
An introductory survey of Russian history, from the 1200s to the present. Focuses on the rise and expansion of the state based in Moscow, and on the various peoples it ruled. Considers continuities and changes between Muscovy, the Russian Empire, the Soviet Union, and the Russian Federation, as well as comparisons to other contemporary states. Central themes include imperial expansion, cultural and religious diversity, war and society, and struggles for social justice and political freedom.
Attributes: Historical Perspectives(Disc)
Equivalent(s): HUMA 547
Grade Mode: Letter Grading

HIST 555 - The Vikings!
Credits: 4
The Vikings spread terror and destruction throughout Europe. They also developed remarkable art forms, cutting edge technology, constructed new cities and kingdoms, and explored the new world 500 years before Columbus. This course will explore the identities of these fierce warriors, intrepid explorers, and farmed poets. This course fulfills history category 2.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

HIST 560 - Modern Britain
Credits: 4
This course explores Great Britain from the American Revolution to the reign of Elizabeth II. We examine Britain's unparalleled Imperial power, the vibrancy of Victorian Culture, and the devastating impact of the two World Wars, which initiated Britain's post-war decline. During the Cold War, Britain rebuilt its position through cultural exports like rock-n'-roll music, royal pomp, and the mini-skirt, but has never fully recovered its status, despite its vibrant multi-cultural allure. Course meets the History major requirements for Group II.
Grade Mode: Letter Grading

HIST 563 - Introduction to Russian Culture and Civilization
Credits: 4
Interdisciplinary course on the development of Russian culture from its origins through the end of the 19th century. Historical documents, literary works, ethnographic materials, films, slides of Russian art, and music. Course meets the History major requirements for Group II.
Attributes: World Cultures(Discovery)
Equivalent(s): RUSS 525
Grade Mode: Letter Grading

HIST 565 - Women in Modern Europe
Credits: 4
A social history of women in Europe from 1700 to the present. Examines the development of the "modern nuclear family," transformations in women's work during the industrial revolution, and women's political evolution from bread rioters to hearth tenders to petitioners. Sources include published diaries, historiographical studies, and novels. Course meets the History major requirements for Group II.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

HIST 566 - Comparative Revolutions: How to Make a Revolution in the World before Marx
Credits: 4
This course in HOW TO MAKE A REVOLUTION (if you lived more than 100 years ago) will ask why the Sea Beggars flooded Holland, the Levellers dug up the Commons, and Black Loyalists fled the independent Americans after their revolution. The class asks how slaves in Haiti defeated Napoleon's troops, utopian socialists built a railway around a cross at the center of Europe, and Marx rallied the workers of the world to unite. Course meets the History major requirements for Group II.
Attributes: World Cultures(Discovery); Writing Intensive Course
Grade Mode: Letter Grading

HIST 571 - Modern Middle East History
Credits: 4
This course surveys the history of the Middle East (defined as the territory of the former Ottoman and Qajar Empires) from 1768 to the present. In addition to offering an overview of major political, social and economic developments, the course aims to sketch a basic picture of social and cultural life at different points. Course meets the History major requirements for Group III.
Attributes: World Cultures(Discovery)
Equivalent(s): HUMA 571
Grade Mode: Letter Grading

HIST 575 - Ancient Near East
Credits: 4
From the Neolithic revolution to the time of Alexander the Great. Rise of civilization; nature of human artistic and intellectual development in the earliest civilizations of Mesopotamia and Egypt; Judaism in its historical setting. Course meets the History major requirements for Group III.
Equivalent(s): CLAS 575
Grade Mode: Letter Grading

HIST 585 - Medieval Islam
Credits: 4
This course examines the origins and expansion of Islam and the development of the Muslim community from the time of Muhammad until the Islamic empires of the 16th century. We will address the associated geographies, artifacts, and legal formations associated with the medieval and early modern Islamic world. The course focuses on major developments in politics, religion, and the arts. Course meets the History major requirements for Group III.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

HIST 588 - History of Modern Africa: 1870 to the Present
Credits: 4
This survey course introduces students to the major forces and dynamics of change in the modern history of Africa, from the late 19th century to the present. The primary focus is on European imperialism and its aftermaths in Africa. Issues to be examined include: the scramble for and partition of Africa; resistance to colonization; the rise and fall of apartheid in Southern Africa; religion and society, music and culture, gender and sexuality, art and literature, pan-Africanism, military rule, HIV/AIDS, democratization, and nation building. Emphasis on African initiatives, and on an exploration of contemporary challenges and the major forces reshaping the history of this oldest, most diverse, and most fascinating continent. Feature films, drama skits, literary works, and guest lectures are utilized. Course meets the History major requirements for Group III.
Grade Mode: Letter Grading

HIST 595 - Explorations
Credits: 1-4
See department listings for semester topic. Course meets History major requirement for Group I, II, or III depending on the topic.
Grade Mode: Letter Grading

HIST 600 - Explorations
Credits: 4
Advanced explorations in one of the fields listed below: A) American History, B) European History, C) World History, D) Ancient History. Barring duplication of subject, may be repeated. Course meets History major requirement for Group I, II, or III depending on the topic.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading
Special Fee: Yes

HIST 603 - European Conquest of North America
Credits: 4
European Conquest of America explores many of the major issues relating to the creation and development of colonial North America. We will focus particularly on the extraordinary heterogeneous mixture of peoples who lived in North America and the Caribbean, and on the complexity and consequences of their interactions. Throughout the semester we will continually evaluate arguments among historians about whether or not it makes sense to understand the colonial period in terms of a conquest, or whether Native Americans retained enough power and resistance throughout the colonial period to make such an interpretation inaccurate. Course meets History major requirement for Group I.
Grade Mode: Letter Grading

HIST 606 - History of the Early Republic
Credits: 4
Explores the histories of the people and institutions that transformed the new United States from a coastal republic of largely independent freeholders to a transcontinental democracy increasingly driven by class. Topics include slavery, the family, reform movements, and the formation of national identity. Course meets History major requirement for Group I.
Grade Mode: Letter Grading

HIST 609 - Special Topics in American Legal History
Credits: 4
In-depth thematic exploration of law in American life. Topics include race and equality in America; community, pluralism, and American law; property, liberty, and law; gender and law. May be repeated for credit with instructor's permission. Consult department listings of topics. Course meets History major requirement for Group I.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

HIST 611 - Civil War Era
Credits: 4
Surveys the period from the presidency of Andrew Jackson to the end of the Reconstruction. Focuses on causes, course, and consequences of the Civil War. Topics include slavery in the Old South, antebellum reform movements, creation and breakdown of the Second Party System, social and economic (as well as military) events during the war and major developments during Reconstruction after the war. Course meets History major requirement for Group I.
Grade Mode: Letter Grading

HIST 612 - Emergence of Industrial America
Credits: 4
Investigates the economic transformation of 19th-century America from a rural, agricultural society to an urban, industrial one. Explores the sweeping economic changes and focuses on such topics as change in work and leisure, westward expansion and its effects on Native Americans, shifts in gender roles, growth of a consumer culture, rise of the labor unions, Populism, immigration, reform and regulation movements, growth of American imperialism, and intellectual developments. Course meets History major requirement for Group I.
Grade Mode: Letter Grading

HIST 613 - American Ways of War
Credits: 4
"Is there an American way of war?" This commonly asked question will be the focal point of the course. To answer that we will study the interactions of both war and society in the United States from the Civil War onwards, addressing such issues as the causes, courses, diplomacy, homefront, legacy, and the art of the great and small wars. Course meets the History major requirement for Group I.
Grade Mode: Letter Grading

HIST 615 - The Rise of Modern United States, 1900-1945
Credits: 4
By 1900, the United States had emerged as the world's leading industrial power and leading destination for millions of immigrants and had begun to become a major player in world affairs. Americans enjoyed unprecedented prosperity and became eager consumers of new inventions and popular culture: cars, radios, jazz records, and the "motion pictures." But they also experienced the worst depression the country had ever known and struggled to make sense of a world that went to war twice within a generation. Women, African Americans, immigrants - all struggled to carve out their place in the new political order. By World War II, the United States assumed many of its "modern" characteristics. Using novels, movies, photographs, sporting events, political speeches and political debates, we will explore both the domestic and the international aspects of the development of modern U.S. Course meets the History requirements for Group I.
Grade Mode: Letter Grading

HIST 618 - American Environmental History
Credits: 4
Examines how nature has been a factor in American history and how Americans have wrestled with the concepts of nature and culture. Topics include industrialization, evolution, conservationism, environmentalism, and environmental diplomacy. Course meets the History major requirement for Group I.
Grade Mode: Letter Grading

HIST 619 - Foreign Relations of the United States
Credits: 4
The history of American diplomacy from the colonial era to the present, with the dividing point at 1900. The focus will be on both the foreign and domestic influences that shaped American diplomacy. Course meets the History major requirement for Group I.
Grade Mode: Letter Grading

HIST 620 - Foreign Relations of the United States
Credits: 4
The history of American diplomacy from the colonial era to the present, with the dividing point at 1900. The focus will be on both the foreign and domestic influences that shaped American diplomacy. Course meets the History major requirement for Group I.
Grade Mode: Letter Grading

HIST 621 - History of American Thought
Credits: 4
This course introduces the subfields of American intellectual and cultural history by assessing the ideas of some of the brightest minds that thought about life on the land we know of as the United States of America before the middle of the nineteenth century. This course surveys more than two centuries of thinkers and their connection to America's plural and evolving popular culture. Ultimately, this course seeks to answer the question: What is the history of American thought?.
Grade Mode: Letter Grading

HIST 632 - Latin American History: Topics
Credits: 4
Topics vary (see department listing for current semester). Seminar entails reading, discussion, and research on literature and documents related to the selected topic. Provides students with the opportunity to do research under close direction. Course meets the History major requirement for Group III.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

HIST 633 - Medieval England 800-1300
Credits: 4
This course provides students with an opportunity to gain an in-depth understanding of the history of medieval England from the beginning of the period of consolidation under the Wessex dynasty in the ninth-century through the end of the thirteenth century. In addition to obtaining a large corpus of information through the reading of a significant monographs dealing with England during this period, students will be challenged to develop the critical analytical skills necessary for the thorough understanding and practice of historical methodologies, with a particular focus on the practice of historical method in writing medieval history. Finally, students will be given the opportunity to improve their communications skills through extensive class discussions dealing with the scholarly works read for this course, and in writing assignments. Course meets the History major requirement for Group II.
Grade Mode: Letter Grading

HIST 634 - Medieval Empires
Credits: 4
This course explores the political, economic, administrative, military, religious, and intellectual foundations of imperial rule in the Middle Ages with a particular focus on the Carolingian, German, and Byzantine Empires of the early and high Middle Ages. Course meets the History Major requirements for Group II.
Grade Mode: Letter Grading

HIST 640 - Holy War in the Holy Land: The Medieval Crusades
Credits: 4
Survey of the medieval military expeditions organized by Christians to secure the Holy Land during the 12th and 13th centuries. Topics considered include the formulation of a "just war" theory; political, intellectual, religious, and military interactions between Christians, Jews, and Muslims; the Crusader State of Jerusalem; and the histories of individual crusades. Course meets the History major requirement for Group II.
Grade Mode: Letter Grading

HIST 641 - Europe after the Black Death
Credits: 4
Explores the dramatic changes that characterized Western Europe as it rebounded in the fifteenth through the seventeenth centuries from the ravages of the Black Death of 1348. Examines the social, political, and artistic developments in late medieval and Renaissance Italy before "crossing the Alps" to trace the expansion of Renaissance culture in Northern Europe. Topics include the humanist movement; new patterns of social organization; the revival of classical antiquity in the arts, architecture, religion, and political theory; the effects on European society of the encounter with the "New World"; shifting roles for men and women in early modern European societies; religious war and conflict. Course meets the History major requirement for Group II.
Grade Mode: Letter Grading

HIST 642 - Saints, Sinners, and Heretics: Europe in the Age of Religious Reform
Credits: 4
Examines the history of Western Christendom from roughly 1400 to 1600, a period of tumultuous religious change throughout Europe. We begin in the Middle Ages where the seeds of religious division were sown. We then tackle Martin Luther's challenge to the Catholic church, trace the diffusion of his message throughout Europe, and address the Catholic response to the evangelizing movements that he inspired. Finally we investigate some of the regional varieties of Protestantism that developed in the latter half of the sixteenth century with a particular focus on Switzerland, Germany, England, Scotland, France, and the Netherlands. Course meets the History major requirement for Group II.
Grade Mode: Letter Grading

HIST 654 - Topics in History of Science
Credits: 4
Advanced study of a selected topic in the history of European science since the Renaissance. Course meets the History major requirement for Group II.
Grade Mode: Letter Grading

HIST 656 - Twentieth Century Europe
Credits: 4
The Twentieth Century began with European nations at the apex of their global power. It ended with their world dominance in ruins. Two World Wars, the rise of Nazism, and communist revolutions had left Europe in the shadow of the United States. Examining European history from the birth of the automobile to the fall of the Berlin Wall, we explore the political, social and cultural forces that made the twentieth century the bloodiest epoch in world history. Course meets the History requirement for Group II.
Grade Mode: Letter Grading

HIST 665 - Themes in Women's History
Credits: 4
In-depth examination of a selected topic in women's history. Topics may include Women and Health, Women in Modern European Political Theory, Comparative History of Women and Revolution. See Time and Room Schedule of history department newsletter for the specific topic. May be repeated for credit with permission of instructor. Course meets the History requirement for Group II.
Grade Mode: Letter Grading

HIST 675 - History of Ancient Greece
Credits: 4
Discover the exciting, turbulent, and innovative world of the Greeks through their history, from the emergence of small cities in the archaic period to the empire of Alexander the Great. Special focus will be on the political, economic and social developments in the rise of the polis (city), the Persian and Peloponnesian Wars, the rise of Macedon and Alexander the Great's conquests. CLAS 403/HIST 403 is encouraged but not necessary.
Equivalent(s): CLAS 675
Grade Mode: Letter Grading

HIST 676 - Topics in Ancient Greek History
Credits: 4
Advanced historical study of a particular period or theme in ancient Greek history. May be repeated barring duplication of subject.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): CLAS 676
Grade Mode: Letter Grading

HIST 677 - History of Ancient Rome
Credits: 4
Discover the fascinating and tumultuous history of the ancient Roman world, from its small beginnings in the early Republic to the high Empire, when Rome controlled the whole Mediterranean basin. Special focus will be on the political and economic conflicts between social classes, the Punic Wars, the fall of the Republic, its transformation into a monarchy, and the golden age of imperial rule. CLAS 404/HIST 404 is encouraged but not necessary.
Equivalent(s): CLAS 677
Grade Mode: Letter Grading

HIST 678 - Topics in Ancient Roman History
Credits: 4
Advanced historical study of a particular period or theme in ancient Roman history. May be repeated barring duplication of subject.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Equivalent(s): CLAS 678
Grade Mode: Letter Grading

HIST 690 - Seminar: Historical Expl
Credits: 4
Seminar in one of the fields listed below: A) American History, B) Atlantic History, C) Canadian History, D) Latin American History, E) Medieval History, F) European History, G) History of Islam, H) Ancient History, I) East Asian History, J) African History, K) Middle Eastern History, L) Historiography, M) Russian History, N) World History, O) British History, P) New Hampshire History, Q) Historical Methodology, R) Irish History, S) History of Science, T) Maritime History, U) Museum Studies. Course meets the History requirements for Group I, II, or III, depending on the topic. May be repeated barring duplication of subject.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): HIST 701
Grade Mode: Letter Grading

HIST 691 - Internship
Credits: 1-4
Supervised internship with a governmental agency, private corporation, philanthropic institution, library, archives, museum, historical society, or other institution seeking individuals interested in historical research.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Credit/Fail Grading

HIST 695 - Independent Study
Credits: 1-4
A) Early American History, B) American National History, C) Canada, D) Latin America, E) Medieval History, F) Early Modern Europe, G) Modern European History, H) Ancient History, I) East Asia, J) Near East and Africa, K) European Historiography, L) American Historiography, M) Russia, N) World History, O) English History, P) New Hampshire History, Q) Historical Methodology, R) Irish History, S) History of Science, T) Maritime, U) Museum Studies. For students showing a special aptitude in history who desire to study an area or subject for which no appropriate course is offered.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

HIST 698 - Internship in Museum Studies
Credits: 4
Supervised position with a museum, historical society, archive, or other history related site.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Credit/Fail Grading

HIST 771 - Museum Studies
Credits: 4
Introduction to theory, methods, and practice of museum studies. Examination of various museum functions, as well as contemporary historical controversies. May be repeated with departmental approval.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

HIST 772 - Studies in Regional Material Culture
Credits: 4
Introduces the theory and methodology of material culture, that is, the study of history through the analysis of buildings, human-created landscapes, and artifacts made and used in the United States, particularly in New England. May be repeated for credit with permission of undergraduate adviser. Course meets the History major requirements for Group I.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

HIST 774 - Historiography
Credits: 4
Analysis of ancient and modern historians. Open to undergraduates with permission. (Not offered every year.)
Grade Mode: Letter Grading

HIST 797 - Colloquium
Credits: 4
Selected topics in American, European, and non-Western history. Required of history majors. Students must elect section in the department office at the time of registration. Course meets the History major requirements for Group I, II, or III, depending on the topic.
Attributes: Writing Intensive Course
Prerequisite(s): HIST 500 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

HIST 799 - Senior Thesis
Credits: 4
Supervised research leading to the presentation of a major research paper. Permission of department chairperson required. May not be used as a substitute for the required senior colloquium.
Grade Mode: Letter Grading

Homeland Security (HLS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HLS 410 - Introduction to Homeland Security
Credits: 4
The primary focus of HLS 410 is to describe the entirety of the homeland security enterprise in the US and to survey many of the major expressions of it, which can become careers in security. This includes a history of homeland security and emergency management disciplines, and the law and policy underpinnings for homeland security and specific units in emergency management, terrorism, intelligence, law and policy, critical infrastructure and risk analysis, corporate security, environmental/human security and cybersecurity.
Grade Mode: Letter Grading

HLS 415 - Fundamentals of Corporate Security
Credits: 4
HLS 415 will introduce the student to the fundamentals of corporate security including the nature, scope, history, and essential elements of organization (or enterprise) security in the workplace, with emphasis on the private sector. Specific areas include the operational aspects of security strategies for identifying and controlling security exposures, risk management strategies, applicable legal issues, personal protection, property protection, role of intelligence, and concepts of disaster planning and management.
Grade Mode: Letter Grading

HLS 455 - Introduction to Cybersecurity
Credits: 4
The primary focus of HLS 455 is to provide a survey of the broad field of cybersecurity and information security/assurance. Topics will include a definition of information security, the need for information security and cybersecurity in both the public and private sectors, ethical and legal issues revolving around cybersecurity, risk management and planning, and information/cyber security technology. The role of the U.S. Department of Homeland Security (DHS) in securing the cyberspace and the nation's information-related infrastructures will also be explored.
Grade Mode: Letter Grading

HLS 480 - Professional Skills in Homeland Security
Credits: 4
HLS 480 prepares students to effectively enter the workforce via an internship or co-op experience. Students learn to prepare a resume and cover letter, practice interviewing, learn about how their personality matches job descriptions, search for internships, and develop an e-Portfolio that describes themselves, their professional aspirations, skills, etc. Professional ethics, decision making, organizational power, basic leadership and management principles and professionalism are discussed and illustrated.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

HLS 505 - Political Violence and Terrorism
Credits: 4
This course provides an interdisciplinary approach to the study of political violence and terrorism. The class includes inquiry into the theories and justifications for political violence of all types, limited war, asymmetric warfare and the contested term terrorism. Trends and reasons for contemporary violent political extremism as a phenomenon are particularly explored from both the U.S. domestic and international perspectives. Students are introduced to the ideologies, goals, and strategies of select organizations and broader extremist movements.
Attributes: Social Science (Discovery)
Equivalent(s): PS 505
Grade Mode: Letter Grading

HLS 510 - Fundamentals of Emergency Management
Credits: 4
This course includes a thorough coverage of the historical and statutory background of emergency management (EM) in the USA as well as the significant laws and policies that have defined and shaped the field, including HSPD 5, HSPD 8, the National Flood Insurance Act, and the Stafford Act. Topics include detailed coverage of FEMA's all hazards approach, the EM cycle, integrated EM, the incident command system, the National Incident Management System, emergency support functions, and risk communications and the homeland security exercise evaluation program (HSEEP) where students are introduced to the both discussion and operations-based exercises and strategies for evaluating exercises. This course culminates with each student writing and formally presenting an integrated emergency management plan.
Prerequisite(s): HLS 410 with a minimum grade of D- and HLS 415 with a minimum grade of D-.
Grade Mode: Letter Grading

HLS 515 - Critical Infrastructure Security and Resilience
Credits: 4
This course includes an introduction to critical infrastructure security, resilience, and risk analysis as it is conceptualized, regulated and used in the homeland security enterprise. Topics include the history and evolution of critical infrastructure protection including the composition, characteristics and risks to critical infrastructures. Public-private partnerships and sector-specific plans are examined. Resilience in a global context and risk analysis as a means by which resources and assets are allocated to critical infrastructure(s) is presented.
Prerequisite(s): HLS 410 with a minimum grade of D- and HLS 415 with a minimum grade of D- and HLS 455 with a minimum grade of D-.
Grade Mode: Letter Grading

HLS 520 - Homeland Security Law and Policy
Credits: 4
This course is an overview of key legal, policy, and ethical issues in the context of Homeland Security policy and practice. Students examine legal concepts regarding constitutional rights of individuals, legal process, access to courts, the law of war, and national security principles as they relate to homeland security legislation and policy initiatives. Legal principles of due process, habeas corpus, search and seizure. Compulsory process, and international agreements are explored in greater depth. The law of war will be examined in the context of preemptive war and the current National Security Strategy, the status of combatants and detention, Elements of national security law, intelligence collection and sharing, the Patriot Act, and military-civilian relations, etc.
Prerequisite(s): HLS 410 with a minimum grade of D-.
Grade Mode: Letter Grading

HLS 540 - Prevention and Detection of Fraud
Credits: 4
Fraud detection and prevention are a perpetual concern for organizations, individuals and society. Course topics include fraud causes and behaviors of fraudsters, the fraud triangle, criminal and civil fraud, red flags, financial statement fraud, procurement fraud, bribery, pyramid schemes, money laundering, corporate governance, fraud risk management and responses. Real-world fraud schemes are explored and discussed. Required course for minor in Forensic Accounting. May not be repeated for credit if taken as BUS 460.
Equivalent(s): BUS 460
Grade Mode: Letter Grading

HLS 550 - History and Structure of the U.S. Intelligence Community
Credits: 4
National security intelligence is a secret nation-state activity to understand or influence an adversarial entity. The United States has a unique Intelligence Community (IC) of 17 organizations that support policymakers. How did the IC develop? How does each component support its mission? This class provides students with an introduction to the history and structure of the United State IC with a focus on the events and policy that shaped its development.
Grade Mode: Letter Grading

HLS 555 - Comparative Homeland Security Systems
Credits: 4
This course will encourage students to become cosmopolitan citizens by gaining knowledge and understanding of cultures other than those of the United States. Students will learn to recognize others' values and, ultimately, accept the many ways in which we all are human. For example, using the Irish struggle for independence from Britain and the Troubles as examples, students will examine Anglo and Irish "culture" and how it is influenced by or how it can influence nation-state security, or conversely, the fight for civil liberties and independence. The main systems and structures in both the US and the UK's domestic security enterprises will be discussed as well as the origins, typologies and goals of several terrorist groups, the basics of the intelligence community in both nations, and how intelligence informs the struggle to contain terrorism. In addition, for homeland security majors, this course can satisfy either the terrorism requirement or the intelligence systems requirement (see instructors). Although a major objective of the course is to prepare students to participate successfully in a managed study abroad program (as a separate course: HLS 656, 1 credit), participation in the study abroad trip is a not required component of this course.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

HLS 580 - Environmental and Human Security
Credits: 4
Students will learn how environmental issues may give rise to socio-political instability around the world which can become threats to US national/homeland security. This course will explore how U.S. domestic and foreign policy, and ultimately, U.S. national security, can be impacted by emergent threats to nations from environmental health issues, climate change, deforestation, infrastructure vulnerabilities, and natural resource shortages caused by rapid industrialization, population growth, and urbanization in less developed countries. In a seminar format, students and faculty will cover a variety of readings and discuss their conclusions and students will have the opportunity to lead class discussions on assigned readings.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

HLS 595 - Independent Study in Homeland Security
Credits: 1-4
This course is an independent study in homeland security. Its main function will be to allow students to complete a 500 level homeland security course required in the major, but who are not able to take the required course when it is offered. HLS 595 can substitute for the required core course. In addition, students can also take HLS 595 as a sophomore level independent study as a variable credit course for students wanting to more deeply explore an area of interest.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

HLS 605 - Disaster Research Methods
Credits: 4
This course offers an overview of various research methodologies and approaches used in emergency and disaster management. Topics include but are not limited to, different aspects of research methods, such as theory, research designs, measurement, validity, reliability, data collection techniques, and ethical considerations. Students will design and draft a research proposal using appropriate research methods to investigate critical research questions.
Prerequisite(s): ENGL 401 with a minimum grade of C- and HLS 510 with a minimum grade of C-.
Grade Mode: Letter Grading

HLS 615 - Introduction to Fraud Investigation
Credits: 4
Fraud Investigation is a specific process including acquisition and verification of information that could lead to the confirmation of fraudulent activity and legal consequences. Course topics include various steps in the fraud investigation process, including identification of fraud, planning an investigation, interviewing, gathering of public and non-public evidence, analysis of data, legal considerations, confidentiality, and writing a fraud examination report. Real-world fraud cases are discussed and analyzed. Required course for minor in Forensic Accounting.
Grade Mode: Letter Grading

HLS 630 - Sports and Large Event Security Management
Credits: 4
This course will address the nature and scope of sport and large event security issues involved in securing the homeland from domestic and international threats to sports and other large events. Motives, methods, and impact of terrorism activity, natural disasters, and crowd management issues in sport and large event venues will be discussed. This course also includes an examination of the basic legislation and operations of the U.S. Department of Homeland Security; risk assessment; security planning options; emergency response and recovery, training and exercises.
Prerequisite(s): HLS 410 with a minimum grade of D-.
Grade Mode: Letter Grading

HLS 640 - Forensic Accounting
Credits: 4
Forensic accounting procedures uncover fraudulent schemes and misappropriation of assets. Course topics include review of the basics of financial accounting, Sarbanes-Oxley legislation, the forensic accounting profession, occupational fraud, financial analysis techniques, money laundering, investigative and interviewing processes, evidence gathering, inferential analysis, and documentation and presentation of the case. Real-life fraud cases solved by forensic accounting skills are analyzed. Required course for minor in Forensic Accounting.
Prerequisite(s): BUS 532 with a minimum grade of D- or ADMN 502 with a minimum grade of D-.
Grade Mode: Letter Grading

HLS 650 - Topics in National Security Intelligence
Credits: 4
What is national security intelligence? In this course students are introduced to definitions of intelligence and how they vary according to the entity employing the definition. Students learn about national security intelligence concepts including collection, analysis, counterintelligence, and covert action. Student will explore the organization and mission of the United States Intelligence Community, state and local intelligence agencies, and their role in Homeland Security.
Prerequisite(s): HLS 410 with a minimum grade of D-.
Grade Mode: Letter Grading

HLS 651 - Issues in Intelligence Collection
Credits: 4
The primary focus of this course is to develop an understanding of intelligence collection in the US and foreign nations, the issues facing intelligence collection and a survey of the various forms of collection. Students will learn the role collection plays in the intelligence community, how various policies affect collection and how different agencies monitor and collect intelligence.
Prerequisite(s): HLS 650 with a minimum grade of D-.
Grade Mode: Letter Grading

HLS 652 - Intelligence Analysis and Production
Credits: 4
National security intelligence analysis is a process of transforming collected data into useable and often actionable products. In this class students will focus on the analysis phase of the intelligence cycle and its relationships with decision maker requirements, intelligence community planning, collection, and dissemination. A primary goal of this class is to increase students' capacity for critical thinking when conducting analytical activities.
Prerequisite(s): HLS 650 with a minimum grade of D-.
Grade Mode: Letter Grading

HLS 653 - Counterintelligence
Credits: 4
Media articles often include depictions of captured spies, criminals, and faceless cyber-attacks. What process is used to identify and defend against these threats? Counterintelligence plays a key role in defending a country or organization from other nation states intelligence services and other nontraditional threats. In this course students will learn about counterintelligence as a phenomenon and critically examine the activities undertaken by counterintelligence organizations.
Grade Mode: Letter Grading

HLS 654 - Covert Action
Credits: 4
On January 3, 2020 the Iranian Revolutionary Guards Corp leader Qasem Soleimani was killed in Iraq by a United States drone strike. Was this event covert action? In this class students will explore covert action and how it is used by nation states to achieve their foreign policy objectives.
Grade Mode: Letter Grading

HLS 655 - Open Source Intelligence
Credits: 4
Open Source Intelligence (OSINT) plays a critical role in national security intelligence. Open sources are defined as those that are publicly available. In this course students will explore and analyze OSINT intelligence from publications, broadcasts, digital media, geographic, and other technical data.
Grade Mode: Letter Grading

HLS 656 - Comparative Homeland Security Systems Lab
Credits: 1
The study abroad component of its prerequisite course, HLS 555. Students participate in a study abroad program designed and led by UNH faculty.
Prerequisite(s): HLS 555 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

HLS 665 - Bioterrorism, Biosecurity, and Biodefense
Credits: 4
This course examines biowarfare, including biological, chemical, and radiological weapons. Historical, plausible, and novel weapons will be studied. Mechanisms of action, biological and societal impacts, detection, treatment and governmental strategies for biodefense will be investigated. Discussions will focus on surveillance and preparedness at the state and federal levels. Relevant aspects of the law will be presented and the bioethical challenges of anti-bioterror research will be explored.
Prerequisite(s): HLS 410 with a minimum grade of D- or BMS 503 with a minimum grade of D-.
Equivalent(s): BSCI 665
Grade Mode: Letter Grading

HLS 695 - Independent Study in Homeland Security
Credits: 1-4
This course is an independent study in homeland security. Its main function will be to allow students to complete a 600 level homeland security course required in the major, but who are not able to take the required course when it is offered. HLS 695 can substitute for the required core course. In addition, students can also take this course as a junior level independent study as a variable credit course for students wanting to more deeply explore an area of interest.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

HLS 750 - Emergent Topics in Homeland Security/Homeland Defense
Credits: 4
This listing features newly introduced or specialized courses. These courses offer a concentrated exploration of a specific topic, such as a particular security risk, policy issue, theoretical approach, or methodological technique.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

HLS 760 - Strategic Planning and Decision Making
Credits: 4
This course investigates the nature of strategic planning as it relates to homeland security and national security in the U.S. Students explore how strategic planning relates to decision making in more stable as well as uncertain environments. Relevant legislation and past decisions (such as the Bay of Pigs and the Cuban Missile Crisis) are explored including concepts and techniques from making high quality decisions. Strategic communication principles and techniques are presented.
Attributes: Writing Intensive Course
Prerequisite(s): HLS 510 with a minimum grade of D- and HLS 515 with a minimum grade of D-.
Grade Mode: Letter Grading

HLS 770 - Internship in Homeland Security
Credits: 4
This course represents the professional work experience required in the homeland security major. Students work in a professional setting for a minimum of 180 hours under the supervision of a site supervisor. All internships require students to identify and complete work on a specific project (s) approved by the HLS coordinator. Internships may be taken at any time after students have completed HLS 480. Note that students who are academically or otherwise unable to enter into internship must take HLS 799 (thesis in homeland security which requires senior standing and permission from the HLS program coordinator).
Prerequisite(s): HLS 480 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 20 credits. May be repeated up to 5 times.
Grade Mode: Credit/Fail Grading

HLS 790 - Capstone in Homeland Security
Credits: 4
This course allows students to work collaboratively with an organization to identify and solve a homeland security, physical security, safety, cybersecurity or emergency management challenges. Each group performs a risk assessment in order to identify their client's primary security or preparedness challenges. Students then use their skill to identify and apply best practices as countermeasures. Students culminate their projects with presentations to their classmates and to their clients. The expectation of this class is to develop a professional example of the student's thinking and writing to solve real world security problems.
Attributes: Writing Intensive Course
Prerequisite(s): HLS 760 with a minimum grade of C-.
Grade Mode: Letter Grading

HLS 795 - Independent Study in Homeland Security
Credits: 1-4
This course is an independent study in homeland security. Its main function will be to allow students to complete a 700 level homeland security course required in the major, but who are not able to take the required course when it is offered. HLS 795 can substitute for the required core course. In addition, students can also take this course as a senior level independent study as a variable credit course for students wanting to more deeply explore an area of interest.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

HLS 799 - Senior Thesis in Homeland Security
Credits: 4
Students work under the direction of a faculty thesis advisor to plan and carry out independent research resulting in an oral presentation and a major research paper. Research projects should include the development of a research thesis/question, a literature review, analysis, and synthesis of relevant data/sources, discussion and interpretation and presentation of results. Senior Thesis can be used to substitute for Internship in HLS. Permission by HLS program coordinator required, open only to HLS seniors.
Attributes: Writing Intensive Course
Prerequisite(s): HLS 510 with a minimum grade of D- and HLS 515 with a minimum grade of D- and HLS 650 with a minimum grade of D- and HLS 760 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Honors (HON)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HON 500H - Special Topics in Honors
Credits: 1-4
This course provides Honors students an opportunity to take a deep dive into a topic selected by the instructor(s). Students participate in active class discussions and hands-on learning.
Attributes: Honors course
Repeat Rule: May be repeated up to 4 times.
Equivalent(s): HONR 500
Grade Mode: Credit/Fail Grading

HON 799H - Honors Thesis Completion
Credits: 1-4
This course supports students in any major who are writing an Honors Thesis. Students will work with the professor to establish thesis expectations, process, and due dates.
Attributes: Honors course
Repeat Rule: May be repeated up to 2 times.
Equivalent(s): HONR 799H
Grade Mode: Letter Grading

Horticultural Technology (HT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

No courses are currently active in the course inventory for this subject prefix.

Hospitality Management (HMGT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HMGT 401 - Introduction to the Hospitality and Tourism Industry
Credits: 4
Review the broad spectrum of the hospitality industry from an historical perspective, in concert with current history, trends, and challenges presented by notable industry executives. Distinguished guests represent all segments of the hospitality industry plus selected allied support businesses. Industry segments include, but are not limited to, hotels and lodging, restaurant and food service, travel and tourism, conferences and conventions, casinos and gaming, clubs and resorts, health care and senior living, franchising and entrepreneurship, and technology support.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

HMGT 405 - Introduction to Food and Service Management
Credits: 0 or 4
This course is designed to build knowledge and experience in food and service management. Basic principles of foodservice management and their application to menu development, food safety, procurement, equipment usage and identification, customer service, marketing, leadership, human resources, and finance are covered during this course. Laboratory experience in both front and back of the house will provide hands-on experience in basic understanding of how a kitchen operates and dining room service. Training in Safe Food Handling, and Alcohol Services leads to Certification.
Grade Mode: Letter Grading

HMGT 554 - Lodging Operations Management
Credits: 0 or 4
The course is designed to introduce the operational aspects of hotel and resorts as well as discuss current trends of the lodging industry, hotel organization, reservations, registration, guest services and communications, hotel security, front office accounting, housekeeping, night audit, planning for operations, sales techniques, revenue management, and human resources management. To achieve the learning objectives, lectures, labs, e-learning course, guest lectures, and individual assignments are employed. Training in hotel analytics leads to CHIA Certification.
Prerequisite(s): HMGT 401 (may be taken concurrently) with a minimum grade of C-.
Equivalent(s): HMGT 654
Grade Mode: Letter Grading

HMGT 570 - International Food and Culture
Credits: 0 or 4
This course explores multiple world cultures using food, language, religion, geography, communication, politics, among other attributes, and compares/contrasts with our own diverse cultures here in the United States. Learn why we eat what we eat, when, and how. Food is a critical component across the world's many different cultures and this course will investigate how they are viewed by persons of different backgrounds. The course will leave you with an expanded understanding and appreciation of why and how persons from diverse cultures with varying backgrounds approach their food and beverage needs differently. Laboratory experience in cooking international cuisine.
Attributes: World Cultures(Discovery); Inquiry (Discovery)
Equivalent(s): HMGT 670
Grade Mode: Letter Grading

HMGT 601 - Management of Customer Services and Experiences
Credits: 0 or 4
The course Management of Customer Services and Experiences Serves as the introduction into the Option Hospitality Management off the BSBA Program at Paul College, UNH. This course is designed to integrate fundamental management principles and techniques in service management, related consumer behavior and experiences. The course touches upon all aspects of service operations and management including service design, service operations, service management and customer behavior. The course will integrate service forecasting techniques, (online) marketing and sales, production delivery systems, service encounters, technology, purchasing, inventory management, human resources, scheduling, productivity and quality issues and its management. In addition to sanitation and safety, product planning, costing, and customer service delivery. Microcredentials may be offered.
Grade Mode: Letter Grading

HMGT 618 - Uniform Systems for the Hospitality Industry
Credits: 4
Following a review of financial statements and an introduction to the Uniform System of Accounts for Hotels and Restaurants, students learn specific applications of managerial accounting and decision support systems for the hospitality industry. Topics include cash flow analysis, cost management, cost-volume-profit analysis, pricing models, budgeting, and forecasting. Students develop an understanding of computer software and back-and front-office computer systems as they relate specifically to the hospitality industry. Lectures, computer exercises, and papers.
Prerequisite(s): ADMN 502 with a minimum grade of C-.
Grade Mode: Letter Grading

HMGT 635 - Leadership and HR Management in Hospitality and Tourism
Credits: 4
The focal point of this class is the intersection between Strategic Organizational Management, Leadership and Human Resources Management in hospitality, events and tourism. To develop the student's understanding of this domain, we will employ a series of readings, case studies, and team presentations that will study people, organizations, and the HR function. As a result of this class, students should develop a robust understanding about the vital role that people – human capital, transactional and transformational Human Resource Management, and good HR strategy play in an service organization's future success. Despite the breadth of our focus, we shall endeavor to maintain the perspective of the Senior HR professional throughout the course.
In addition, students should discover that effective strategic HR Management is not easily carried out and that significant barriers exist that can cause firms to fall short of their higher-orders of achievement.
Attributes: Writing Intensive Course
Equivalent(s): RMP 661
Grade Mode: Letter Grading

HMGT 655 - Hospitality Finance and Development
Credits: 4
Finance and Asset Management are subjects of critical importance to the successful launch, management, and expansion of hotel and hospitality enterprises, and real estate ventures. Hotel Property Development and Asset Management entails the study of the fundamental concepts of financial management and how they apply to the development of hospitality and real estate businesses. The topics will be taught by lecture presentations, case study analysis, investigation of current industry activities, a semester-long team project, and required readings and assignments from the course textbook and other materials.
Grade Mode: Letter Grading

HMGT 661 - Event Design, Planning, and Management
Credits: 4
Strategic and logistical considerations in managing the planning, development, marketing, and implementation of meetings, conventions, and events.
Grade Mode: Letter Grading

HMGT 667 - Advanced Food & Beverage Operations & Event Management
Credits: 0 or 4
A project management course integrating advanced management principles and techniques in the presentation of a large-scale gourmet dining event. This class examines services & operational management protocols: planning, forecasting and budgeting, marketing and sales, meal plan preparation, production, execution and delivery systems, service encounters, technology, purchasing and inventory management, human resources, scheduling, productivity and quality issues, HR and risk management.
Grade Mode: Letter Grading

HMGT 681 - Contemporary Resort Development and Management
Credits: 4
The course is designed to introduce the management of hotels, resorts and destinations as units of how tourism and hospitality is structured. It focusses on development, operations and management as underlying concepts. In a classic hotel setting, hotel development and management can be treated as two separate entities. However, resorts focus not only on the convenience and service needs of guest, but also on their leisure needs. Hence resort development and management is a guest experience focused ongoing activity. The concept of destinations is an very important one and an aggregation of many players (hotels, resorts, etc.) in an industrial and geographical meaning as well as a brand. Topics discussed in the class include overview, concept, history and current trends of the industry, planning and development, major recreational activities and facilities, management, and risk management, marketing and branding, as well as planning, stakeholder policy and sustainability issues. The course applies global case studies and lots of practical management exposure.
Attributes: Writing Intensive Course
Equivalent(s): HMGT 681W
Grade Mode: Letter Grading

HMGT 695 - Independent Analysis
Credits: 2-12
Study and research project for honor students to advance knowledge in lodging and food services fields.
Equivalent(s): HMGT 695W
Grade Mode: Letter Grading

HMGT 696 - Supervised Student Teaching Experience
Credits: 1-8
Participants are expected to perform such functions as attending classes, leading discussion groups, assisting faculty, presenting information in undergraduate courses that they have successfully completed, holding office hours, grading papers and exams. Enrollment is limited to juniors and seniors who have had above average GPAs.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

HMGT 698 - Topics
Credits: 1-4
Special topics and current developments in Hospitality, Franchising and Service Management. Course may be repeated when topics change.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

HMGT 758 - Revenue Management: The Art of Pricing
Credits: 4
Revenue management has become an increasingly popular subject in many businesses, particularly in the service sector. This course will help students to learn more about formulating tactics and strategies to maximize revenues for organizations. The overall objective of this course is to provide students with the know-how and tools to make pricing decisions that align with the firm's strategy, drive profitability, and lead to sustainable competitive advantage. This course focuses on thoroughly understanding and articulating the monetary and psychological value drivers of the firm's value proposition, applying appropriate monetary equivalents, and successfully communicating these to the purchaser. Rather than seeking to "optimize" prices for the short run, this course takes a longer-term view of managing markets strategically. This course thoroughly examines the role of pricing in each element of the marketing mix, considering the source of volume, segmentation, targeting, and positioning, and shows how pricing can be used to align the elements of strategy and execution.
Grade Mode: Letter Grading

HMGT 771 - International Wine and Beverage
Credits: 4
Explore the wide world of wine, beer and spirits, through lectures, sensory evaluations, and in-class tasting exercises. Also learn about how to purchase, store, and serve different beverages. Enrolled students must be at least 21 years old.
Grade Mode: Letter Grading
Special Fee: Yes

HMGT 775 - Modern Operations and Innovations in Hospitality and Tourism
Credits: 4
Capstone course for the Hospitality Management Option, interrelating and applying strategic management and innovation concepts to hospitality and service organizations. Cases from hotel companies, restaurant chains, and other tourism or service-related businesses, supplemented by economic and other published information from the industry, are used as departure points for class discussion. Students will apply knowledge gained in the course in a simulated hospitality environment. This course presents the principles of organization, management and decision models applied to the tasks and challenges of hospitality operations. The class involves developing an understanding of the techniques of problem solving (including planning, organizing, staffing, communication, directing and controlling operations). Students will analyze various types of industry data and make strategic inferences based upon that analysis and based on a comprehensive understanding of bench marking and performance reports. Students are offered to receive the designation of Certified Hotel Industry Analyst (CHIA).
Grade Mode: Letter Grading

HMGT 777 - Casino Management
Credits: 4
Examines the history of the gaming industry and the development, organization and management of casinos. Investigates economics, moral and social issues of gaming including problem gambling. Covers gaming regulations, accounting and taxation of casinos, casino marketing, national and international gaming destinations, game probabilities and the interaction of the casino department with other divisions of mega casino resorts including lodging, food and beverage and meetings and conventions. A central focus will be on current trends and events. A field trip to a casino resort is required for those enrolled students at least 21 years old on the day the trip is scheduled.
Mutual Exclusion: No credit for students who have taken HMGT 777J.
Grade Mode: Letter Grading

HMGT 795 - Internship II
Credits: 1-4
Off-campus work in the hospitality industry for on-the-job skill development. Normally supervision is provided by a qualified individual in the organization with frequent consultation by the faculty sponsor. Initial sponsorship of an Hospitality Management faculty member must be obtained followed by approval of Paul advisor and Dean's Office. Special permission required to earn more than 4 credits in one semester. For Paul College juniors and seniors with 3.0 or better cumulative GPA.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Credit/Fail Grading

HMGT 798 - Topics
Credits: 4
Special Topics.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

HMGT 799 - Honors Thesis/Project
Credits: 4-8
Supervised research leading to the completion of an honors thesis or project; required for graduation from the honors program in hospitality management.
Attributes: Honors course; Writing Intensive Course
Grade Mode: Letter Grading

Hotel, Restaurant, Travel (HRT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HRT 600 - Hotel and Restaurant Management
Credits: 4
This course considers the analysis of theories, principles, and techniques of successful hotel and restaurant management. Common issues associated with hotel and restaurant management are emphasized with the goal of enhancing students' ability to diagnose and address diverse problems and implement effective service strategies in a hospitality setting. Topics may include: the principles of organizing, the formulation of goals and objectives, decision-making processes, staffing, employee/guest relations, and labor management negotiations.
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-.
Equivalent(s): HRT 600G
Grade Mode: Letter Grading

HRT 601 - Food Service Systems and Control
Credits: 4
This course covers the systems and techniques appropriate to manage food, beverage, and labor costs in food service operations. Topics may include: management, marketing, menu development, costs and pricing, quality assurance, production, and operational analysis. Students develop case studies that apply best practices in food service management. Students may evaluate evidence-based sales techniques and procedures and propose strategies to promote a food service operation, including marketing, public relations, and entrepreneurship.
Prerequisite(s): HRT 600 with a minimum grade of D- or HRT 600G with a minimum grade of D-.
Equivalent(s): HRT 601G
Grade Mode: Letter Grading

HRT 635 - Leadership and Sustainable Tourism
Credits: 4
This course provides a comprehensive introduction to the nature and scope of leadership and sustainable tourism planning at the local, regional, and national levels. Topics addressed may include: distinguishing between leading and managing, understanding systems and change leadership as well as the economic, social, environmental, and policy considerations within the sustainable development framework. Students may discuss competencies required for leading, planning, and development guidelines in different geographical areas. Students may illustrate how diversity, systems leadership, change leadership and conflict resolution promotes effective organizational management.
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-.
Equivalent(s): HRT 602G
Grade Mode: Letter Grading

HRT 660 - Event, Meeting, and Conference Management
Credits: 4
This course explores strategies to develop meaningful and well-organized conferences, meetings, and special events. The course addresses but is not limited to event logistics such as: client management, facilities management, compliance with ADA and other laws and regulations, contract negotiation, labor planning, standards for food and beverage management, meeting/organization agendas, transportation, schedule of events, break-out sessions, leisure activities, finances, and evaluations. Students may develop case studies that apply best practices in event management.
Prerequisite(s): HRT 600 with a minimum grade of D- or HRT 600G with a minimum grade of D-.
Equivalent(s): HRT 603G
Grade Mode: Letter Grading

HRT 680 - Revenue Management in the Hospitality Industry
Credits: 4
Students in this course will explore the strategies for realizing revenue in a complex hospitality environment. Case studies and real-world examples may be used to understand how, where, and when opportunities arise for maximizing revenue generation. While topics may vary, this course focuses primarily on the lodging, food and beverage, event, and leisure/recreation components of resort operations. Students will explore the historical role of revenue management as well as the current and future trends that operators are employing. This course focuses on both proactive and reactive strategies to address real-time changes within the industry.
Prerequisite(s): (ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D-) and (HRT 600 with a minimum grade of D- or HRT 600G with a minimum grade of D-).
Equivalent(s): HRT 607G
Grade Mode: Letter Grading

Human Development & Family Studies (HDFS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HDFS 525 - Human Development
Credits: 0 or 4
This course provides an overview of human development from conception through death with an emphasis on the contexts in which development occurs, and a focus on thinking about ways to enhance the lives of individuals and families across the lifespan. The knowledge gained in this course will allow students to understand the needs of individuals across all life stages, and critically reflect on their own development.
Attributes: Social Science (Discovery)
Equivalent(s): FS 525, FS 525H, HDFS 525H
Grade Mode: Letter Grading

HDFS 545 - Intimate Relationships and Families
Credits: 4
This course provides students with an overview of contemporary research and theory on intimate and family relationships. An historical overview of marriage, intimate partnering, and the family will be covered while also exploring diverse experiences. Emphasis will be placed on the cultural, societal, and political norms and tensions surrounding intimate and family relationships and related public policy. Students will also have an opportunity to reflect on their own attitudes, thoughts, and values.
Attributes: Social Science (Discovery)
Equivalent(s): FS 545, FS 645
Grade Mode: Letter Grading

HDFS 553 - Personal and Family Finance for Family Life Professionals
Credits: 4
This course focuses on applied financial management emphasizing teaching financial issues to a variety of audiences. Topics include savings, credit, insurance and retirement, and programs and resources available to facilitate financial education.
Equivalent(s): FS 553
Grade Mode: Letter Grading

HDFS 555 - Research Methods in HDFS
Credits: 4
This course is an introduction to research methods as used in Human Development and Family Studies to provide students with a foundational understanding of how to design, implement, complete, and evaluate research studies. The research process will be emphasized, including review and application of current research literature, generating research questions, formulation of hypotheses, conceptual and operational definitions, measurement, sample selection, quantitative and qualitative analyses, designing and interpreting research designs, and understanding ethical responsibilities in research.
Grade Mode: Letter Grading

HDFS 565 - Introduction to Child Life
Credits: 4
This course provides an introduction to the theory and practice of the child life profession and family centered care. Child life professionals work with children and adolescents facing acute, chronic, or life-threatening illness and traumatic injuries, and their families. Topics include children's emotional reactions to hospitalization, use of play, preparation for medical procedures, family support, and designing healing environments.
Equivalent(s): SW 565
Grade Mode: Letter Grading

HDFS 586 - Families at Risk
Credits: 4
This course is designed to look at the challenging biological, cultural and situational factors that affect the contemporary family. Concerns such as immigration, terrorism, disease, and media influences will be discussed, along with global problems of climate change, war, violence, alcohol and drug abuse, and economic change. This class is about how families cope with the stress associated with these challenges, but also how they adapt, how to promote resilience, and how families can thrive in the face of adversity. Students will explore remedies, solutions and support networks that help families in crisis.
Prerequisite(s): HDFS 545 with a minimum grade of D-.
Equivalent(s): FS 586
Grade Mode: Letter Grading

HDFS 590 - Learning Through Play
Credits: 4
This class will focus on theories and stages of play, developmentally appropriate play activities, and examine the role of the teacher/child life specialist in creating an environment which promotes learning through play.
Grade Mode: Letter Grading

HDFS 610 - Introduction to Marriage and Family Therapy
Credits: 4
Marriage and family therapy is a clinical mental health treatment model that sees the entire family system as essential in the healing process. The introduction to marriage and family therapy (MFT) course us designed to provide undergraduate students with the opportunity to develop: (1) an introductory knowledge of core family systems theory concepts; (2) a basic history of marriage and family therapy and its current practices; (3) the application of systems theory in multiple career paths; and (4) the application of introductory level therapeutic skills and practices.
Prerequisite(s): HDFS 545 with a minimum grade of C-.
Grade Mode: Letter Grading

HDFS 623 - Infant and Child Development
Credits: 4
This course provides an overview of the physical, cognitive, language, and social-emotional development of children from the prenatal period through early and middle childhood. Theories of development are discussed as well as research methodologies used in the study of child development. Special attention is given to landmark and current research findings regarding development during this period of the lifespan.
Equivalent(s): FS 623
Grade Mode: Letter Grading

HDFS 624 - Adolescent Development
Credits: 4
This course examines the normative changes adolescents experience in biological, social, emotional, and cognitive domains. Emphasis is on the contexts of adolescent development including family and peer relationships, school, work, leisure, and broader cultural influences. Students will learn about problematic and risky behaviors as well as the positive development outcomes associated with this period of the lifespan.
Equivalent(s): FS 624
Grade Mode: Letter Grading

HDFS 625 - Adult Development
Credits: 4
This course covers the general biological, psychological, and cultural theories and issues related to adult development and aging from emerging adulthood to the oldest old. The course emphasizes diversity in the process of aging and the influence of various contexts on that process. Designed for students who want to become more knowledgeable about successful aging as well as those who plan to work in adult and gerontological research or social services settings.
Equivalent(s): FS 625
Grade Mode: Letter Grading

HDFS 630W - Youth Facing Adversity
Credits: 4
This course focuses on childhood risks such as poverty, family stress and dysfunction, social and emotional problems, and bullying, as well as how children cope with risk and demonstrate resilience. Students will learn about and visit a number of community programs in New Hampshire that support children and their families in times of stress. Students will hear from multiple guest speakers who research and/or support youth at-risk such as child advocates, counselors, social workers, juvenile detention workers, human service professionals, and teachers.
Attributes: Writing Intensive Course
Equivalent(s): HDFS 444A
Grade Mode: Letter Grading

HDFS 635 - Teaching and Learning in Early Childhood Settings
Credits: 4
This course covers the theoretical and developmentally-appropriate approaches to supporting young children's physical, social, emotional, and cognitive development in early childhood settings. Weekly four-hour practicum experience working with preschool children at the UNH Child Study and Development Center is required.
Attributes: Writing Intensive Course
Prerequisite(s): HDFS 525 with a minimum grade of C- and HDFS 623 with a minimum grade of C-.
Equivalent(s): FS 635
Grade Mode: Letter Grading
Special Fee: Yes

HDFS 641 - Parenting Across the Life Span
Credits: 4
This course provides an overview of theory and current research on parenting in contemporary society. The course explores the challenges and changing nature of parenting across development, current parenting issues, and parenting in diverse family types. Students will also have an opportunity to reflect on their own attitudes, thoughts, and values in regards to parenting.
Prerequisite(s): HDFS 525 with a minimum grade of D- and HDFS 545 with a minimum grade of D-.
Equivalent(s): FS 641
Grade Mode: Letter Grading

HDFS 684 - Curriculum for Young Children
Credits: 4
This course focuses on the design, implementation, and evaluation of developmentally-appropriate activities in a classroom of young children. This course takes the stance that curriculum is not simply activities or plans, but a product of societal, school, and classroom culture as influenced by particular views of development.
Attributes: Writing Intensive Course
Prerequisite(s): HDFS 623 with a minimum grade of C- and HDFS 635 (may be taken concurrently) with a minimum grade of C-.
Equivalent(s): FS 734, HDFS 734
Grade Mode: Letter Grading

HDFS 695 - Independent Study
Credits: 1-6
Supervised in-depth scholarly experience relevant to any of the HDFS specializations: Child Development, Family Support, and Lifespan Development. Student must work directly with a supervising faculty member to develop and complete the project.
Equivalent(s): FS 695
Grade Mode: Letter Grading

HDFS 697 - Special Topics
Credits: 1-6
Focused examination of a particular theoretical, methodological, or policy issue.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): FS 697, FS 697W, HDFS 697W
Grade Mode: Letter Grading

HDFS 707 - Practicum
Credits: 1-6
Supervised in-depth experience in professional setting designed to increase the student's understanding of and experience working with children, adolescents, or families. Students must work with a supervising faculty member to identify a practicum site. 01) Child, 02) Family, 03) Adolescent.
Equivalent(s): FS 707
Grade Mode: Credit/Fail Grading
Special Fee: Yes

HDFS 709 - Child Development Internship
Credits: 4
Supervised teaching internship at the UNH Child Study and Development Center with children 6 wks-6 years old age for 9 hours each week. Internship experiences include teaching, documentation, and assessment. In addition students attend a weekly one-hour seminar for an in-depth reflection and analysis of the internship experience. Materials fees.
Prerequisite(s): HDFS 525 with a minimum grade of D- and HDFS 623 with a minimum grade of D- and HDFS 635 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): FS 709
Grade Mode: Letter Grading
Special Fee: Yes

HDFS 743 - Families, Schools, and Community
Credits: 4
This course takes an ecological approach to emphasize the critical value of effective family-school-community partnerships in enhancing the education of young children. Models of family-school-community partnerships are explored. Practical knowledge regarding the experiences of those from diverse backgrounds to best prepare students to interact with, and support, all children and families is highlighted. Students actively engage within the community to build bridges between families, schools, and the greater community.
Attributes: Writing Intensive Course
Equivalent(s): HS 743
Grade Mode: Letter Grading

HDFS 746 - Human Sexuality
Credits: 4
This course addresses the biological, psychological, and cultural aspects of human sexuality and gender across the lifespan. Opinions, attitudes, and values affecting societal responses to sexual issues are explored in relation to scientific research and theory. Students will be better prepared to deal with sexual issues in their personal and professional lives.
Equivalent(s): FS 746
Grade Mode: Letter Grading

HDFS 757 - Race, Class, Gender, and Families
Credits: 4
This course explores the intersection of race, class, and gender in family life in the US. Theory, research, and other relevant literature is used to examine the variety of family configurations in our society today and the diverse experiences that individuals and families have as a result of existing social, political, and economic institutions.
Attributes: Writing Intensive Course
Equivalent(s): FS 757
Grade Mode: Letter Grading

HDFS 760 - Family Programs and Policies
Credits: 4
This course explores the relationship between family policy and legislation with programs, services, and family experiences at the local, state and national level. Course content includes concepts associated with planning for, implementing, and evaluating family policies and programs; as well as exploring the complexities of family policy and the policy-making process. Course assignments will challenge students to understand and evaluate family policies and programs that are compatible with their professional interests.
Attributes: Writing Intensive Course
Prerequisite(s): HDFS 545 with a minimum grade of D-.
Equivalent(s): FS 760, HDFS 760W
Grade Mode: Letter Grading

HDFS 771 - Observation and Assessment of Young Children
Credits: 4
Comprehensive view of various observation techniques for determining children's strengths and emerging skills. Exploration of issues regarding the use of formal assessments and testing with young children, retention and transitional placements, and the parent's role in testing.
Prerequisite(s): HDFS 525 with a minimum grade of D- and HDFS 623 with a minimum grade of D- and HDFS 635 with a minimum grade of D-.
Equivalent(s): FS 771
Grade Mode: Letter Grading

HDFS 776 - Children, Adolescents and the Law
Credits: 4
This course is designed to familiarize students with the specialized laws and legal systems that govern children and adolescents. Discussion will focus on society's efforts to balance competing interests and goals. The course provides the chance to explore laws and processes that affect children and adolescents as they interact with the court system, their caregivers, families and society at large.
Attributes: Writing Intensive Course
Equivalent(s): FS 776
Grade Mode: Letter Grading

HDFS 782 - Community Internship
Credits: 6
Supervised experience working in human services agencies. Students spend a minimum of 16 hours per week in a selected community program. Admission by application only. A senior-level course with 6 credits being taken during the semester. 20 credit hours of HDFS course work required prior to taking this course.
Prerequisite(s): HDFS 525 with a minimum grade of D- and HDFS 545 with a minimum grade of D- and HDFS 760 (may be taken concurrently) with a minimum grade of D-.
Repeat Rule: May be repeated up to 2 times.
Equivalent(s): FS 782
Grade Mode: Credit/Fail Grading

HDFS 785 - Seminar for Student Teachers I
Credits: 2
This seminar supplements the student teaching experience and provides a transition to the profession of teaching for those students admitted to the early childhood certification option. Students must apply during the spring semester of their junior year to be considered for the early childhood certification option.
Prerequisite(s): HDFS 525 with a minimum grade of D- and HDFS 545 with a minimum grade of D- and HDFS 623 with a minimum grade of D- and HDFS 635 with a minimum grade of D-.
Grade Mode: Letter Grading

HDFS 786 - Seminar for Student Teachers II
Credits: 2
This seminar supplements the student teaching experience and provides a transition to the profession of teaching for those students admitted to the early childhood certification option. Students must apply during the spring semester of their junior year to be considered for the early childhood certification option.
Co-requisite: HDFS 788
Prerequisite(s): HDFS 525 with a minimum grade of D- and HDFS 545 with a minimum grade of D- and HDFS 623 with a minimum grade of D- and HDFS 635 with a minimum grade of D-.
Equivalent(s): FS 786
Grade Mode: Letter Grading

HDFS 788 - Student Teaching Young Children
Credits: 8
Supervised teaching experience. Students spend a minimum of 20 hours per week in a selected program for young children working with a cooperating teacher. Students must apply during the spring semester of their junior year to be considered for the early childhood certification option.
Co-requisite: HDFS 786
Prerequisite(s): HDFS 525 with a minimum grade of D- and HDFS 545 with a minimum grade of D- and HDFS 623 with a minimum grade of D- and HDFS 635 with a minimum grade of D- and HDFS 785 with a minimum grade of D-.
Equivalent(s): FS 788
Grade Mode: Credit/Fail Grading
Special Fee: Yes

HDFS 792 - Community Internship Seminar
Credits: 2
This biweekly seminar focuses on issues of concern to family internship students, provides advanced training in educational strategies for working with families, and develops students' professional skills. Admission to family internship program required prior to taking this course.
Co-requisite: HDFS 782
Equivalent(s): FS 792, FS 792W
Grade Mode: Letter Grading

HDFS 793 - Community Internship Seminar
Credits: 2
This biweekly seminar focuses on issues of concern to family internship students, provides advanced training in educational strategies for working with families, and develops students' professional skills. Admission to family internship program required prior to taking this course.
Co-requisite: HDFS 782
Prerequisite(s): HDFS 792 with a minimum grade of D-.
Equivalent(s): FS 792, FS 792W
Grade Mode: Letter Grading

HDFS 794 - Families and the Law
Credits: 4
This course explores statutory law, case law and the judicial processes that affect families as members interact with each other and with society. Students will become familiarized with the family court system and its role in regulating the family.
Attributes: Writing Intensive Course
Equivalent(s): FS 794
Grade Mode: Letter Grading

HDFS 797 - Advanced Special Topics
Credits: 1-6
Focused examination of a particular theoretical, methodological, or policy issue.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): FS 797
Grade Mode: Letter Grading

HDFS 799 - Honors Senior Thesis
Credits: 2-4
Under direction of a faculty sponsor, students plan and carry out an independent investigative effort in an area of family, child, and/or consumer studies, resulting in a written thesis and an oral presentation before students and faculty. Two-semester sequence as continuing course.
Attributes: Honors course
Grade Mode: Letter Grading

Human Resource Management (HRM) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HRM 420 - Human Resource Management
Credits: 4
This course focuses on how human resource managers build effective networks and coalitions with others to accomplish tasks and stimulate motivation, cooperation, and satisfaction among work groups. It develops an understanding of the role and functions of human resource practitioners in a variety of organizational settings. Students build a knowledge base and identify the skills needed in the primary areas of human resources administration, which may include areas such as interviewing and selection, employee benefits and total compensation, performance assessment, professional development, workplace safety and wellness, employee relations, collective bargaining, workplace diversity, human resource information systems, rewards and recognition, performance coaching and corrective action, compliance and employment law, and organizational development.
Equivalent(s): HRM 518G, MGMT 518G
Grade Mode: Letter Grading

HRM 470 - Human Resource Application in Today's Organizations
Credits: 4
Human resource is the application of the current external environment and internal corporate culture to employing, training, compensating, retaining, and developing policies relating to people within their organizations. This course focuses on various ways managers have a direct impact on the success of their organization by applying human resource methodologies. The content covers human resource functions such as recruitment and selection, compensation and benefits, performance management, workplace safety and wellness, employee relations, collective bargaining, workplace diversity, rewards and recognition, compliance and employment law, and change management. Throughout, there will be an emphasis on effective communication with employees and internal business partners with a goal of building impactful networks and coalitions.
Prerequisite(s): HRM 420 with a minimum grade of D- or HRM 518G with a minimum grade of D- or MGMT 518G with a minimum grade of D-.
Equivalent(s): HRM 605G
Grade Mode: Letter Grading

HRM 580 - Change Management
Credits: 4
This course explores the change process in organizations. The organizational structure is viewed as the context in which individual, interpersonal, group, organizational, and systemic change is examined. Characteristics of functional and dysfunctional systems are defined, and the change process is delineated. Models, skills, techniques, and strategies for positive change are examined.
Prerequisite(s): COM 460 with a minimum grade of D- or COMM 542G with a minimum grade of D- or MGMT 566 with a minimum grade of D- or MGMT 566G with a minimum grade of D- or MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-.
Equivalent(s): HRM 620G, MGMT 620G
Grade Mode: Letter Grading

HRM 635 - Managing Conflict
Credits: 4
This course teaches concepts and skills to manage conflict effectively between two people, within small groups, within organizations, and between organizations and systems. It is designed to help those who want to sharpen their ability to understand, manage, and create opportunity out of conflict. As a result of this course, one knows oneself and others better, enhances personal and interpersonal skills, and develops techniques to improve relations at work and at home. the class may include actual conflict situations through role playing, and practicing new communication skills to prepare managers in real-world situations.
Equivalent(s): HRM 621G, MGMT 621G
Grade Mode: Letter Grading

HRM 660 - Recruitment, Selection, and Employee Development
Credits: 4
HR professionals need to adapt to changing objectives and market conditions to recruit, select, and retain employees with the necessary skills to further organizational goals all while steering clear of legal and other risks. Attracting and retaining the right talent to the right position from the start is crucial for organizational success.
Attributes: Writing Intensive Course
Prerequisite(s): HRM 420 with a minimum grade of D- or HRM 518G with a minimum grade of D-.
Equivalent(s): HRM 610G
Grade Mode: Letter Grading

HRM 680 - Compensation and Performance Management
Credits: 4
Human capital is a strategic asset for organizations. To recruit and retain employees, human resource leaders create compensation packages and develop performance evaluation plans to strengthen the organization. The course may cover topics such as job evaluation, employee benefits programs, performance evaluations, wage and salary administration, pay level decisions, and financial incentives.
Prerequisite(s): HRM 420 with a minimum grade of D- or HRM 518G with a minimum grade of D-.
Equivalent(s): HRM 615G
Grade Mode: Letter Grading

HRM 710 - Law and Ethics in Human Resource Management
Credits: 4
This course addresses the complexity of employment and labor law and workplace policies. It explores issues such as alcohol and drugs, sexual harassment, privacy rights, wrongful discharge, the Americans with Disabilities Act (ADA), negligent employment practices, and discrimination. Upon completion of this course, students will have the ability to demonstrate how human resource managers can apply this knowledge to protect and add value to their organizations.
Prerequisite(s): HRM 420 with a minimum grade of D- or HRM 518G with a minimum grade of D-.
Equivalent(s): HRM 607G, MGMT 607G
Grade Mode: Letter Grading

HRM 740 - Workplace Coaching
Credits: 4
This course engages students to learn and utilize core coaching concepts and methodologies to increase organizational and individual performance in the professional workplace. Differences between coaching and mentoring, coaching dynamics as a performance management tool, the eight steps to coaching for performance, and an array of coaching methodologies appropriate in diverse scenarios may be explored. Upon completion of this course students are expected to be able to apply coaching methodologies to common workplace scenarios. NOTE: This course is a business coaching course specific to Management and Human Resource Management majors.
Attributes: Writing Intensive Course
Prerequisite(s): MGMT 566 with a minimum grade of D- or MGMT 566G with a minimum grade of D-.
Equivalent(s): HRM 637G, MGMT 637G
Grade Mode: Letter Grading

Human Services (HMSV) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HMSV 424 - Human Services and the Helping Process
Credits: 4
This course provides an introduction to the helping process in the context of a human service agency. There are two essential components to this course. The first examines the economic, social, and political forces that have shaped the development of human service organizations and their status today. It reviews the issues and obstacles involved in providing quality service to various populations in our society. The second major emphasis offers students the opportunity to review the basic elements of the helping process. Students examine the development of a professional working relationship with clients. They also learn what the process of helping includes. Emphasis includes the influence of personal experiences and values on prospective workers in the helping professions.
Equivalent(s): BEHS 502G, HMSV 500G
Grade Mode: Letter Grading

HMSV 480 - Case Management
Credits: 4
This course examines the theories, roles, and functions of case management. Students study examples of case management to include the professional skills necessary to be a successful case manager. The course explores case management issues with special populations and includes a discussion of the importance of ethics and the essential elements of case-note documentation, along with challenges and legal issues that case managers are faced with in organizations.
Prerequisite(s): (HMSV 424 with a minimum grade of D- or HMSV 500G with a minimum grade of D- or BEHS 502G with a minimum grade of D-) and (PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D-).
Equivalent(s): HMSV 501G
Grade Mode: Letter Grading

HMSV 595 - Field-Based Practicum in Human Services
Credits: 4
This field-based practicum is an entry-level field experience designed to assist Human Services majors in exploring career and vocational settings in which they can use and apply their knowledge and skills. The practicum is exploratory in nature, involves extensive student initiative in designing and implementing the practicum, and is conducted under the supervision of the practicum mentor. A supplementary objective of the practicum is to explore and assess possibilities for settings in which the student may engage in a Human Services capstone internship or ideas for a potential Human Services capstone project. NOTE: This practicum requires students to complete a 25-hour work experience at a college-approved practicum site. Registration for this course is by permission of Academic Affairs. Early registration deadlines may apply.
Prerequisite(s): HMSV 480 with a minimum grade of D- or HMSV 501G with a minimum grade of D-.
Equivalent(s): HMSV 540G
Grade Mode: Letter Grading

HMSV 597 - Project-Based Practicum in Human Services
Credits: 4
This project-based practicum is designed to assist Human Services majors in exploring career and vocational settings in which they can use and apply their knowledge and skills. The practicum is exploratory in nature, involves extensive student initiative in designing and implementing the practicum, and is conducted under the supervision of the practicum mentor. A supplementary objective of the practicum is to explore and assess possibilities for settings in which the student may engage in a Human Services capstone internship or ideas for a potential Human Services capstone project. NOTE: Students must follow college policy that all research activities which involve human participants, regardless of the level of risk foreseen, require review and written approval by the College's Institutional Review Board prior to the initiation of the activity.
Prerequisite(s): HMSV 480 with a minimum grade of D- or HMSV 501G with a minimum grade of D-.
Equivalent(s): HMSV 541G
Grade Mode: Letter Grading

HMSV 795 - Integrative Capstone: Internship in Human Services
Credits: 4
This capstone course is a field-based internship designed to develop and hone the practical application skills of a Human Services major. The course requires students to integrate the knowledge and skills gained from other courses in the program and to demonstrate the ability to apply their knowledge to practical situations. Students apply for an internship at a self-selected site and negotiate the terms of the internship experience with a site supervisor under the general auspices of their college mentor. The internship requires documented evidence of 80 hours of supervised experience and practice in a field setting where human services knowledge and skills are applied. NOTE: Registration for this course, a field-based experience, is by permission of the Academic Affairs. Early registration deadlines will apply. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602G with a minimum grade of D- or CRIT 602 with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): HMSV 651G
Grade Mode: Letter Grading

HMSV 797 - Integrative Capstone: Project in Human Services
Credits: 4
This project-based integrative capstone course in Human Services focuses on the concepts and techniques of successful Human Services practitioners. Students integrate the knowledge and skills gained from other courses in the Human Services program and demonstrate the ability to apply knowledge to new subject matter and practical situations. Students develop and implement a project within their chosen concentration (professional interest) that includes an applied research project, a written rationale, and synthesis of theory and practice. NOTE: Students must follow college policy that all research activities that involve human participants, regardless of the level of risk foreseen, require review and written approval by the College's Institutional Review Board prior to the initiation of the activity. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602G with a minimum grade of D- or CRIT 602 with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): HMSV 650G
Grade Mode: Letter Grading

Humanities (HUMA)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HUMA 401 - Introduction to the Humanities
Credits: 4
Introduction to the interdisciplinary study of the humanities. Taking as its entry point a significant work, the course is organized by topics related to that work, selected and arranged to invoke lively intellectual debate among faculty and students alike. Group lectures by the four core humanities faculty members. The instructors teaching the course will provide material for smaller weekly discussion sections led by each of those faculty members. Requirements include lively discussions, papers, and examinations. Not repeatable.
Attributes: Humanities(Disc)
Equivalent(s): HUMA 401W
Grade Mode: Letter Grading

HUMA 401W - Introduction to Humanities
Credits: 4
Introduction to the interdisciplinary study of the humanities. Taking as its entry point a significant work, the course is organized by topics related to that work, selected and arranged to invoke lively intellectual debate among faculty and students alike. Group lectures by the three core humanities faculty members. The instructors teaching the course will provide material for smaller weekly discussion sections led by each of those faculty members. Requirements include lively discussions, papers, and examinations.
Attributes: Humanities(Disc); Writing Intensive Course
Equivalent(s): HUMA 401
Grade Mode: Letter Grading

HUMA 411 - Humanities I
Credits: 4
Introduction to the humanities and Western culture through literature, history, philosophy, music, art, and architecture. Examination of selected historical periods from classical Greece through the Renaissance through readings, films, slides, and field trips.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading
Special Fee: Yes

HUMA 412 - Humanities II
Credits: 4
Introduction to the humanities and Western culture through literature, history, philosophy, music, art, and architecture. Examination of selected historical periods from the Enlightenment to the present through the use of readings, films, slides, and field trips.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

HUMA 440A - Honors/Hooked: Narratives of Addiction, Recovery, and Redemption
Credits: 4
This course explores literature about addiction through both literary an psychological lenses. It focuses on the redemption narrative that structures the understanding of addiction for writers and readers alike. Readings include stories of religious redemption, short fiction, memoirs, self-help texts, and narrative and psychological theory. This course is part of the Honors Symposium "Engaging Addiction". The courses in the Symposium join several times during the semester for common meetings where perspectives can be compared and explored.
Attributes: Honors course; Humanities(Disc)
Grade Mode: Letter Grading

HUMA 440B - Honors/That Belongs in a Museum! Museums and the Ownership of Antiquities
Credits: 4
Suppose you stumbled upon an artifact from an Indigenous Native American people in your backyard. Do you own it? Or do the heirs of those who produced it? Or does it belong in a museum for all to see? In a series of controversial case studies we will examine what it means to “own” the past, how it should be protected and preserved, and what role museums have had—-and should have—in safeguarding that past.
Attributes: Honors course; Humanities(Disc)
Grade Mode: Letter Grading

HUMA 440H - Honors/Changing Our Minds: Revolutions in Thought
Credits: 4
This course is inspired by Freud's idea that human self-understanding advances during great revolutions in thought. We study several revolutions in science and belief, from Marx to Darwin, and consider whether a general model applies to them all. How have ideas about the universe and human beings' place in it changed dramatically at certain points in history? Do revolutions in thought have a common structure? What revolution are we living in today? This course is part of an Honors symposium titled "The Copernican Lens: Dawn and Limits of Certainty in Physical Science and the Humanities", which runs concurrently with three other "Copernicus Lens" courses in other fields during the same semester. Taking its point of departure from the revolution in astronomy introduced by Nicolaus Copernicus, the symposium explores the intersections of types of thinking about the universe and humanity across history, especially the relationship between scientific and humanistic thinking. The implications of key transformations in scientific and humanistic thought are traced in the realms of philosophical ideas about humans' place in the world, and historical understandings of the development of science, belief, and truth itself. The course will be run in a seminar, discussion-based format, meeting twice a week for discussion (Mondays & Wednesdays) and once a week (Fridays) for a shared plenary with the other three "Copernicus Lens" courses. Among the requirements of each course in the Honors symposium is participation in plenary sessions when the students from all four courses meet together. The four instructors (Professors Nathan Schwadron [Physics], Subrena Smith [Philosophy], Rachel Trubowitz [English], and Paul Robertson [Classics, Humanities and Italian Studies]) have planned the plenary sessions around common activities and learning materials, approached from the individual perspectives of their own discipline. By learning from each of the professors, the students in all the courses will gain an understanding of the different disciplinary perspectives that can be applied to the study of science in its cultural and historical contexts. The course qualifies for "Historical Perspectives" credit in the Discovery Program because it introduces students to major developments in the history of science and belief that have significantly shaped contemporary life. Through study of specific episodes and historians' interpretation of them, students will gain an understanding of the methods of historical inquiry. They will also come to grasp the historical contingency of beliefs and assumptions through entering imaginatively into worldviews different from those of the present.
Attributes: Historical Perspectives(Disc); Honors course; Writing Intensive Course
Grade Mode: Letter Grading

HUMA 444E - What is a Criminal?
Credits: 4
Criminals are people who break the law -- In theory. How do people become criminals (with regard to biological, cultural, and economic influences)? What happens to them in the criminal justice system, and how does the system shape the definition of "criminal"? We will also discuss "criminals of conscience" from Thoreau and Gandhi to Edward Snowden. The course will emphasize reading but will also engage with other media, including films, podcasts, and visual art.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

HUMA 444F - Travelers in the Premodern World
Credits: 4
Travel is a fundamental aspect of the human experience. This course explores the human experience of travel using materials originating from across premodern world. Students investigate materials ranging from maps and pilgrimage accounts, to poetry and stories to understand what has compelled people to undertake the often perilous road.
In the process, they consider the role of travel in cultural contact, communication, exchange, and the generation an spread of knowledge.
Attributes: World Cultures(Discovery); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

HUMA 500 - Critical Methods in the Humanities
Credits: 4
Critical analysis of works in the humanities. Focuses on major texts, evaluation of secondary literature, research writing, criticism. Required of all HUMA majors.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Equivalent(s): ECS 550
Grade Mode: Letter Grading

HUMA 505 - Introduction to Religion
Credits: 4
This course provides an introduction to religion, exploring the various ways that this phenomenon has been understood, approached, practiced, and studied across human history. The course will examine the different ways that religion can be defined, drawing from a variety of humanities and other disciplines. Foundational theories explaining the origins, persistence, and continued relevance of religion will be compared and applied to different traditions. Topics include concepts of divinity, rituals, myth, mysticism and spirituality, pilgrimage, death and the afterlife, and ultimate reality.
Attributes: Humanities(Disc)
Equivalent(s): RS 505
Grade Mode: Letter Grading

HUMA 510A - Ancient Humanities: Cultures and Empires
Credits: 4
Humans are social animals and, from an early period, they organized into cities and empires. How did peoples like the ancient Mesopotamians, Egyptians, Indians, Greeks, Chinese, or Romans view themselves? How did they conceive of the world? Why was power distributed to some and not others? This co-taught course examines art, philosophy, history, and cultures from the ancient world to offer an introduction to the human experience from approximately 3000 BCE to 700 CE.
Attributes: FinePerformingArts(Discovery); Writing Intensive Course
Equivalent(s): HUMA 510B, HUMA 510C, HUMA 510D
Grade Mode: Letter Grading

HUMA 510B - Ancient Humanities: Cultures and Empires
Credits: 4
Humans are social animals and, from an early period, they organized into cities and empires. How did peoples like the ancient Mesopotamians, Egyptians, Indians, Greeks, Chinese, or Romans view themselves? How did they conceive of the world? Why was power distributed to some and not others? This co-taught course examines art, philosophy, history, and cultures from the ancient world to offer an introduction to the human experience from approximately 3000 BCE to 700 CE.
Attributes: World Cultures(Discovery); Writing Intensive Course
Equivalent(s): HUMA 510A, HUMA 510C, HUMA 510D
Grade Mode: Letter Grading

HUMA 510C - Ancient Humanities: Cultures and Empires
Credits: 4
Humans are social animals and, from an early period, they organized into cities and empires. How did peoples like the ancient Mesopotamians, Egyptians, Indians, Greeks, Chinese, or Romans view themselves? How did they conceive of the world? Why was power distributed to some and not others? This co-taught course examines art, philosophy, history, and cultures from the ancient world to offer an introduction to the human experience from approximately 3000 BCE to 700 CE.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Equivalent(s): HUMA 510A, HUMA 510B, HUMA 510D
Grade Mode: Letter Grading

HUMA 511A - Medieval Humanities: Rise of Global Empires
Credits: 4
The medieval period saw a dynamic explosion in cultural connections. From the Islamic caliphates to the Mongols to the European empires in the Americas and Asia, the origins of global interconnectivity can be found in the period between 700 and 1700 CE. In this co-taught course, we explore the art, philosophy, history, and cultures of the medieval world to see how global connectivity shaped the human experience.
Attributes: FinePerformingArts(Discovery); Writing Intensive Course
Equivalent(s): HUMA 511B, HUMA 511C, HUMA 511D
Grade Mode: Letter Grading

HUMA 511B - Medieval Humanities: Rise of Global Empires
Credits: 4
The medieval period saw a dynamic explosion in cultural connections. From the Islamic caliphates to the Mongols to the European empires in the Americas and Asia, the origins of global interconnectivity can be found in the period between 700 and 1700 CE. In this co-taught course, we explore the art, philosophy, history, and cultures of the medieval world to see how global connectivity shaped the human experience.
Attributes: World Cultures(Discovery); Writing Intensive Course
Equivalent(s): HUMA 511A, HUMA 511C, HUMA 511D
Grade Mode: Letter Grading

HUMA 511C - Medieval Humanities: Rise of Global Empires
Credits: 4
The medieval period saw a dynamic explosion in cultural connections. From the Islamic caliphates to the Mongols to the European empires in the Americas and Asia, the origins of global interconnectivity can be found in the period between 700 and 1700 CE. In this co-taught course, we explore the art, philosophy, history, and cultures of the medieval world to see how global connectivity shaped the human experience.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Equivalent(s): HUMA 511A, HUMA 511B, HUMA 511D
Grade Mode: Letter Grading

HUMA 512A - Modern Humanities: Colonies, Constitutions, and Capital
Credits: 4
The world we know took shape since the 1600s as European empires conquered much of the world; industrialization and capitalism expanded and redistributed power and wealth; and science opened new ways of viewing and changing the world. Humans forged new ideas to justify or challenge these changes. This co-taught course explores the art, philosophy, history, and cultures of the modern world to understand how it came to be.
Attributes: FinePerformingArts(Discovery); Writing Intensive Course
Equivalent(s): HUMA 512B, HUMA 512C, HUMA 512D
Grade Mode: Letter Grading

HUMA 512B - Modern Humanities: Colonies, Constitutions, and Capital
Credits: 4
The world we know took shape since the 1600s as European empires conquered much of the world; industrialization and capitalism expanded and redistributed power and wealth; and science opened new ways of viewing and changing the world. Humans forged new ideas to justify or challenge these changes. This co-taught course explores the art, philosophy, history, and cultures of the modern world to understand how it came to be.
Attributes: World Cultures(Discovery); Writing Intensive Course
Equivalent(s): HUMA 512A, HUMA 512C, HUMA 512D
Grade Mode: Letter Grading

HUMA 512C - Modern Humanities: Colonies, Constitutions, and Capital
Credits: 4
The world we know took shape since the 1600s as European empires conquered much of the world; industrialization and capitalism expanded and redistributed power and wealth; and science opened new ways of viewing and changing the world. Humans forged new ideas to justify or challenge these changes. This co-taught course explores the art, philosophy, history, and cultures of the modern world to understand how it came to be.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Equivalent(s): HUMA 512A, HUMA 512B, HUMA 512D
Grade Mode: Letter Grading

HUMA 512D - Modern Humanities: Colonies, Constitutions, and Capital
Credits: 4
The world we know took shape since the 1600s as European empires conquered much of the world; industrialization and capitalism expanded and redistributed power and wealth; and science opened new ways of viewing and changing the world. Humans forged new ideas to justify or challenge these changes. This is the Humanities section of a co-taught course that explores the art, philosophy, history, and cultures of the modern world to understand how it came to be. Students registered in this course can only earn credit towards the Humanities Discovery category and cannot satisfy Discovery categories associated with other sections of this team-taught course.
Attributes: Humanities(Disc); Writing Intensive Course
Equivalent(s): HUMA 512A, HUMA 512B, HUMA 512C
Grade Mode: Letter Grading

HUMA 513B - Global Humanities
Credits: 4
In this co-taught topics course, students will study art, philosophy, history, and cultures of a particular region of the globe, most often one underrepresented in the traditional study of Western Humanities. Students will consider internal diversity, change over time, and interactions with other regions. Topics may include Africa, the Indian Ocean, Latin America, the Mediterranean, the Middle East, South or East Asia, or associated diasporas. May be repeated if specific topic is different.
Attributes: World Cultures(Discovery); Writing Intensive Course
Repeat Rule: May be repeated up to 1 time.
Equivalent(s): HUMA 513A, HUMA 513C, HUMA 513D
Grade Mode: Letter Grading

HUMA 513C - Global Humanities
Credits: 4
In this co-taught topics course, students will study art, philosophy, history, and cultures of a particular region of the globe, most often one underrepresented in the traditional study of Western Humanities. Students will consider internal diversity, change over time, and interactions with other regions. Topics may include Africa, the Indian Ocean, Latin America, the Mediterranean, the Middle East, South or East Asia, or associated diasporas. May be repeated if specific topic is different.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Repeat Rule: May be repeated up to 1 time.
Equivalent(s): HUMA 513A, HUMA 513B, HUMA 513D
Grade Mode: Letter Grading

HUMA 513D - Global Humanities
Credits: 4
In this co-taught topics course, students will study art, philosophy, history, and cultures of a particular region of the globe, most often one underrepresented in the traditional study of Western Humanities. Students will consider internal diversity, change over time, and interactions with other regions. Topics may include Africa, the Indian Ocean, Latin America, the Mediterranean, the Middle East, South or East Asia, or associated diasporas. May be repeated if specific topic is different.
Attributes: Humanities(Disc); Writing Intensive Course
Repeat Rule: May be repeated up to 1 time.
Equivalent(s): HUMA 513A, HUMA 513B, HUMA 513C
Grade Mode: Letter Grading

HUMA 514A - Space, Place, & the Environment
Credits: 4
In this co-taught topics course, students will explore the relationship between people and the spaces they inhabit. How do ideas shape environments, and how do environments shape ideas? How does "place" differ from "space"? Studied through an interdisciplinary lens, topics may include sustainability, environmental humanities, the built environment, and urbanism. Topics may also cover how communities shape and interact with their environments. May be repeated if specific topic is different.
Attributes: FinePerformingArts(Discovery); Writing Intensive Course
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

HUMA 514B - Space, Place, & the Environment
Credits: 4
In this co-taught topics course, students will explore the relationship between people and the spaces they inhabit. How do ideas shape environments, and how do environments shape ideas? How does "place" differ from "space"? Studied through an interdisciplinary lens, topics may include sustainability, environmental humanities, the built environment, and urbanism. Topics may also cover how communities shape and interact with their environments. May be repeated if specific topic is different.
Attributes: World Cultures(Discovery); Writing Intensive Course
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

HUMA 514C - Space, Place, & the Environment
Credits: 4
In this co-taught topics course, students will explore the relationship between people and the spaces they inhabit. How do ideas shape environments, and how do environments shape ideas? How does "place" differ from "space"? Studied through an interdisciplinary lens, topics may include sustainability, environmental humanities, the built environment, and urbanism. Topics may also cover how communities shape and interact with their environments. May be repeated if specific topic is different.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

HUMA 519 - Classical Greece
Credits: 4
Examination of the culture of classical Greece through the history, drama, philosophy, and art of the period. Open to all students. Recommended for students in the humanities major.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

HUMA 525 - Humanities and the Law
Credits: 4
This multidisciplinary course examines the nature of justice, legal systems and law in various historical contexts, including how these have been conceived, how they originated and the role of the professional judiciary, as well as the relationship between law and ethics. Consideration of how legal ideas have changed over time and built upon each other. May be repeated once if specific topic is different.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

HUMA 526 - Humanities and Science
Credits: 4
In this interdisciplinary course, students examine the ways in which scientific and technological understanding affects the development of cultural expression. Scientific, technological and environmental factors are sometimes discussed as if they are separate from human beings, but in this course we will consider the myriad direct, complex, and surprising ways that they drive cultural shifts and are then understood in evolving ways by cultures. Topics vary with instructor. May be repeated once if topics is different.
Attributes: Humanities(Disc); Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): HUMA 651
Grade Mode: Letter Grading

HUMA 527 - Humanities and Religion
Credits: 4
This course examines the role of religion, religious ideas and religious practice in world cultures using a combination of methodologies drawn from different humanities disciplines, with a particular emphasis on comparative approaches and investigating how religion is used to create and express cultural identity around the globe.
Attributes: World Cultures(Discovery); Writing Intensive Course
Equivalent(s): ANTH 527
Grade Mode: Letter Grading

HUMA 547 - Introduction to Russian History: Russia and the World
Credits: 4
An introductory survey of Russian history, from the 1200s to the present. Focuses on the rise and expansion of the state based in Moscow, and on the various peoples it ruled. Considers continuities and changes between Muscovy, the Russian Empire, the Soviet Union, and the Russian Federation, as well as comparisons to other contemporary states. Central themes include imperial expansion, cultural and religious diversity, war and society, and struggles for social justice and political freedom.
Attributes: Historical Perspectives(Disc)
Equivalent(s): HIST 547
Grade Mode: Letter Grading

HUMA 550 - Budapest Spring Semester: Special Studies in Comparative Ideas
Credits: 4
This course involves periodic offerings in literature, art, history, philosophy and political science designed to stimulate reflection on ideas and issues in Hungarian and Central European history and culture in a larger global context. Topics vary depending upon the expertise of the resident faculty.
Co-requisite: INCO 588
Attributes: Humanities(Disc)
Grade Mode: Letter Grading
Special Fee: Yes

HUMA 551 - Budapest Spring Semester: Field Studies in Art and Culture
Credits: 6
This course is designed to provide students with first-hand experience of art, history, culture, folklore, and traditions of Hungary and Central Europe. The course combines preparatory readings with guided field trips to museums, historical sites, and culturally significant events and locations. Students maintain a weekly blog reflecting on field trip experiences.
Co-requisite: INCO 588
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

HUMA 563 - Introduction to Russian Culture and Civilization
Credits: 4
Interdisciplinary course on the development of Russian culture from its origins through the end of the 19th century. Historical documents, literary works, ethnographic materials, films, slides of Russian art, and music.
Attributes: World Cultures(Discovery)
Equivalent(s): HIST 563
Grade Mode: Letter Grading

HUMA 571 - Modern Middle East History
Credits: 4
This course surveys the history of the Middle East (defined as the territory of the former Ottoman and Qajar Empires) from 1768 to the present. In addition to offering an overview of major political, social and economic developments, the course aims to sketch a basic picture of social and cultural life at different points. Course meets the History major requirements for Group III.
Attributes: World Cultures(Discovery)
Equivalent(s): HIST 571
Grade Mode: Letter Grading

HUMA 698 - Independent Study
Credits: 4
Independent study open only to highly qualified juniors and seniors who have completed at least four humanities courses above the 400 level. Requires original research and substantial writing projects under the direction of a member of the core faculty of the humanities.
Grade Mode: Letter Grading

HUMA 701W - Capstone Course
Credits: 4
Students will investigate the intersections of the fields of Classics, Humanities, and Italian Studies through the exploration of a common theme. Working across disciplines, students will learn how scholars from these fields have approached common issues. Students will also demonstrate their ability to conduct research by engaging in a semester-long specialized project connected to the course theme.
Attributes: Writing Intensive Course
Equivalent(s): CLAS 701W, ITAL 701W
Grade Mode: Letter Grading

HUMA 795 - Study of Creativity
Credits: 4
A study of human creativity through representative lives and works of such figures as daVinci, Einstein, Kathe Kollwitz, Bach, Dickens, and Freud. Lectures, class discussions, films, and slides supplemented by gallery tours plays, and concerts. Open to students with a background in humanities or by permission of the instructor.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading
Special Fee: Yes

HUMA 796 - Study of Contemporary Issues
Credits: 4
Current social and political issues with focus on recent developments in public policy, science, and business, and their impact of social values.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

HUMA 798 - Research Seminar
Credits: 1-2
Provides a context within which students may discuss and receive direction in the course of completing a major research paper. At the end of the seminar, students present their research to the faculty and their fellow students.
Attributes: Writing Intensive Course
Prerequisite(s): HUMA 500 with a minimum grade of D-.
Grade Mode: Letter Grading

HUMA 799 - Research Seminar
Credits: 3-4
Provides a context within which students may discuss and receive direction in the course of completing a major research paper. At the end of the seminar, students present their research to the faculty and their fellow students.
Prerequisite(s): HUMA 500 with a minimum grade of D- and HUMA 798 with a minimum grade of D-.
Grade Mode: Letter Grading

Humanities (HUMN) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

HUMN 470 - World Religions
Credits: 4
This course offers a comparative study of world religions. The focus of the course is to acquire a broad overview of world religions through an examination of sacred texts, art and iconography, as well as religious experience and practice. Theological, philosophical and cultural influences are considered as religious language is examined. Religions considered are: Islam, Judaism, Hinduism, Christianity, Buddhism, religions of Africa, as well as primal religions.
Attributes: Human Thought Exp (Gen Ed)
Equivalent(s): HUMN 504G
Grade Mode: Letter Grading

HUMN 480 - Introduction to Ethics
Credits: 4
This course introduces students to a variety of prominent ethical theories. It examines their complex interrelations, historical development, and relevance to ordinary life. Students are encouraged to engage in the critical analysis and comparison of these theories and to consider how they might explain and evaluate contemporary controversies such as war, environmental protection, euthanasia, and abortion. Relationships between ethics and other areas of philosophical investigation are considered.
Attributes: Human Thought Exp (Gen Ed); Humanities(Disc)
Equivalent(s): HUMN 505G
Grade Mode: Letter Grading

HUMN 502 - American Popular Culture
Credits: 4
This course examines the origin, nature, and social impact of popular culture in America. Students explore and define what culture is, beginning with the differences between high culture, or the culture of the elite and intelligentsia, and low culture, or the culture of the masses - particularly as these differences in taste, recreation, art, and leisure activities relate to social and economic class, educational level, political power, health, and human development. Subsequently, the focus is primarily on aspects of popular culture. Students acquire and hone the skills of cultural analysis by dissecting both the ephemeral and archetypal facets of an eclectic and wide-ranging sampling of public media, art, music, fads, trends, and entertainment.
Attributes: Human Thought Exp (Gen Ed); Humanities(Disc)
Equivalent(s): HUMN 502G
Grade Mode: Letter Grading

HUMN 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in Humanities. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): HUMN 544G
Grade Mode: Letter Grading

HUMN 560 - Introductory Spanish I
Credits: 4
HUMN 560: Introductory Spanish I establishes the foundational principles of grammar and vocabulary with a focus on present and present progressive tense comprehension and basic interpersonal communication in the Spanish language. Students will practice reading, writing, listening comprehension, and verbal expression so that they will be able to engage in first-level interpersonal exchanges. Introduction to diverse cultures from across the Spanish-speaking world will be included. Introductory Spanish I & II taken together satisfy the foreign language requirement.
Attributes: Human Thought Exp (Gen Ed)
Equivalent(s): HUMN 560G
Grade Mode: Letter Grading

HUMN 565 - Introductory Spanish II
Credits: 4
Introductory Spanish II expands upon the fundamental principles of grammar and vocabulary with a focus on past and future tense comprehension and fluid interpersonal communication in the Spanish language. Students will practice reading, writing, listening comprehension, and verbal expression so that they will be able to engage in real world Spanish-speaking environments. Study of diverse cultures from across the Spanish-speaking world will be included. HUMN 560 and HUMN 565 taken together satisfy the foreign language requirement.
Attributes: Human Thought Exp (Gen Ed)
Prerequisite(s): HUMN 560 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken SPAN 402.
Grade Mode: Letter Grading

HUMN 625 - Introduction to Cultural Theory
Credits: 4
This writing and reading intensive course is a general introduction to the critical perspectives and theories that enliven contemporary cultural studies with attention to various schools of 20th and 21st-century criticism, critical applications, and critical terminology. Theories covered include: Marxism, Psychoanalytic criticism, Structuralism, Post-structuralism, Feminist literary studies, Gender studies, Queer studies, Critical Race studies, Post-colonialism, New Historicism, Cultural studies, and Postmodernism. More broadly, this course explores current studies of literature and culture, examining the practices and values of literary and cultural scholars, students, and teachers in order to gain an understanding of the tradition and norms that have emerged from those practices and values, and finally, to consider which of those trends are most valuable for future critical endeavors in the field of cultural studies.
Attributes: Human Thought Exp (Gen Ed)
Prerequisite(s): (ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D-) and (CRIT 501 with a minimum grade of D- or CRIT 501G with a minimum grade of D-).
Equivalent(s): HUMN 625G
Grade Mode: Letter Grading

HUMN 644 - Special Topics: Upper Level
Credits: 1-4
A study of current and variable topics in Humanities. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): HUMN 644G
Grade Mode: Letter Grading

HUMN 797 - Integrative Capstone: Project in Humanities
Credits: 4
This capstone course for Humanities and English majors is designed to integrate learning from the entire program in an individually-customized project. Students demonstrate competency in the study of the humanities by producing a substantive original essay based on in-depth research. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): HUMN 650G
Grade Mode: Letter Grading

Information Technology (IT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

IT 403 - Introduction to Internet Technologies
Credits: 4
Introductory course exploring the fundamentals of Internet communications with an emphasis on the World Wide Web. Students develop an understanding of the Internet's underlying technologies and learn how to utilize them as contributing members of the Web community. Students become proficient with creating and publishing Web pages using HTML and CSS. No prior knowledge or experience is assumed. No credit if credit earned for CIS 405. (Note CIS 405 is offered at UNH Manchester, and is not related to CS 405 at UNH Durham.)
Grade Mode: Letter Grading

IT 502 - Intermediate Web Design
Credits: 4
An intermediate level exploration of the theory and practice of Web design. Students learn the fundamentals of design theory applicable to the World Wide Web and examine tools and techniques for applying that knowledge to their projects. Additional topics include information architecture, usability, accessibility, optimization, typography, and market visibility. Working knowledge of XHTML and CSS required.
Prerequisite(s): IT 403 with a minimum grade of D-.
Grade Mode: Letter Grading

IT 505 - Integrative Programming
Credits: 4
Expands prior programming knowledge through the introduction of another programming language, with a particular emphasis on integrative programming techniques common within IT. Topics include data access and exchange; database concepts; effective interfaces; and leveraging third-party APIs, libraries, and frameworks.
Prerequisite(s): CS 416 with a minimum grade of D- or CS 417 with a minimum grade of D-.
Grade Mode: Letter Grading

IT 520 - Foundations of Information Technology
Credits: 4
Fundamentals of computer hardware, software, and data. Topics include processors, memory, storage, resource management, and discrete mathematics.
Prerequisite(s): CS 415 with a minimum grade of C- or CS 410C with a minimum grade of C- or CS 410P with a minimum grade of C-.
Grade Mode: Letter Grading

IT 604 - Server-side Web Development
Credits: 4
An intermediate-level examination of the theory and practice of developing server-side applications for the World Wide Web. Students will learn practical techniques for designing and implementing data-driven Web sites through the use of server-side processing. Working knowledge of HTML, CSS, and some programming language is required.
Prerequisite(s): IT 403 with a minimum grade of D- and (CS 410 with a minimum grade of D- or CS 414 with a minimum grade of D- or CS 415 with a minimum grade of D-).
Grade Mode: Letter Grading

IT 605 - Full-Stack Web Development
Credits: 4
An examination of the theory and practice of developing applications for the World Wide Web utilizing tools and techniques across the full stack of Web technologies. Students will leverage their existing programming skills to learn practical techniques for designing and implementing Web-based applications involving both client-side and server-side processing.
Prerequisite(s): IT 403 with a minimum grade of C- and IT 505 with a minimum grade of D-.
Grade Mode: Letter Grading

IT 609 - Network/Systems Administration
Credits: 4
Introduces the central issues in administration of a networked computer system. Topics include the client-server model (including support of mail, FTP, Telnet, the Web), disk and file systems, backup and recovery, and security. Privacy and other legal/social issues will be discussed.
Prerequisite(s): IT 520 with a minimum grade of D- and (CS 410 with a minimum grade of D- or CS 414 with a minimum grade of D- or CS 415 with a minimum grade of D-).
Grade Mode: Letter Grading

IT 612 - Scripting Languages
Credits: 4
This course is a study of the class of programming languages and tools known as scripting languages. Topics include: a general discussion of language design and its relationship to the intended computing environment, introduction to the command-line environment, the role of scripts in controlling and connecting other programs and components, basic functionality of at least two scripting languages, and the syntax use of regular expressions. Programming projects in multiple languages will be required.
Prerequisite(s): IT 505 with a minimum grade of D- or CS 515 with a minimum grade of D-.
Grade Mode: Letter Grading

IT 630 - Data Science and Scalable Data Systems
Credits: 4
A practical course on building the data foundation for data science and analytics. Create reliable, scalable data for dashboards, apps, and machine learning—with an introduction to core concepts in data modeling, pipeline design, quality assurance, streaming, and governance. Prepares students to deliver dependable data that powers real analysis and products—skills in high demand across careers in analytics, AI, and machine learning.
Prerequisite(s): ADMN 520 with a minimum grade of D- or BIOL 528 with a minimum grade of D- or BUS 430 with a minimum grade of D- or HMP 540 with a minimum grade of D- or MATH 439 with a minimum grade of D- or MATH 539 with a minimum grade of D- or MATH 540 with a minimum grade of D- or MATH 644 with a minimum grade of D- or PSYC 402 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

IT 666 - Cybersecurity Practices
Credits: 4
Through readings, exercises, research papers, and exams students will acquire the skills needed to implement solutions for security-related issues. Students will discuss security policies, legislation, system procedures, tools, and techniques. Students will analyze the patterns that attackers use to gain access to systems and understand what is required to defeat those attack patterns. At the conclusion of the course, students will have a heightened sense of security in the actions they take when using and maintaining computer systems.
Prerequisite(s): CS 527 with a minimum grade of D-.
Grade Mode: Letter Grading

IT 699 - Internship
Credits: 1
Provides the opportunity to apply academic experience in settings associated with future professional employment. Proposals for the internship must be approved by the instructor prior to registration. Students may receive compensation for their internship work.
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 3 times.
Grade Mode: Credit/Fail Grading

IT 705 - Project Management for Information Technology
Credits: 4
This course focuses on a core set of project management essentials that can affect the bottom line of project technical and business performance. These are termed "best practices," and those addressed are: formal risk management, agreement on interfaces, metrics based scheduling/tracking, frequent binary completion milestones, incremental development, people aware management style, and change management. The emphasis is on information technology projects; however, the basic principles are pertinent to a wider class of project domains.
Attributes: Writing Intensive Course
Prerequisite(s): CS 518 with a minimum grade of D-.
Grade Mode: Letter Grading

IT 718 - Cloud Computing Principles
Credits: 4
Students will learn fundamental cloud architectural principles of: operational excellence, security, reliability, performance efficiency, and cost optimization through readings, labs, and a hands-on project. Course material will cover cloud offerings from Amazon's AWS, Microsoft's Azure, and Google's Cloud Platform. Students complete a semester-long project in which they are required to implement a complete Cloud solution.
Prerequisite(s): CS 527 with a minimum grade of D-.
Grade Mode: Letter Grading

IT 725 - Network Technology
Credits: 4
Introduction to fundamental concepts of computer networks and exploration of widely-used networking technologies. Topics include principles of congestion and error control; network routing; local, wireless and access networks; application protocol design; and network programming. In-depth discussion of the Internet suite of protocols.
Prerequisite(s): IT 520 with a minimum grade of D-.
Equivalent(s): CS 725
Grade Mode: Letter Grading

IT 760W - Human-Computer Interaction
Credits: 4
This course is a broad introduction to designing, prototyping, and evaluating user interfaces in the context of Human-Computer Interaction (HCI) theory and practice. Additional topics may include the history of computer interfaces, theories of human cognition and perception, observational techniques, and experimental design. Coursework includes lectures, programming assignments, writing assignments, class presentations, and group projects.
Attributes: Writing Intensive Course
Prerequisite(s): CS 416 with a minimum grade of C- or CS 417 with a minimum grade of C-.
Equivalent(s): CS 760
Mutual Exclusion: No credit for students who have taken CMPL 622.
Grade Mode: Letter Grading

IT 775 - Database Technology
Credits: 4
Topics include database architecture, schema design and definition, entity-relationship diagrams, data retrieval and update, and indexing performance. Architectures for single-user, multi-user, client-server, and web access are introduced. The relational data model is emphasized but alternative database models, such as semi-structured and object models, are introduced. Database administration topics include examination of metadata information, data integrity, and management of users and privileges, performance tuning, transactions, isolation levels, and security. Ethics of data protection are introduced. Students develop skill in SQL. Not open to CS majors.
Prerequisite(s): IT 505 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken CS 775.
Grade Mode: Letter Grading

IT 780 - Topics in Information Technology
Credits: 4
Material not normally covered in course offerings.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

IT 791 - Senior Project I
Credits: 2
First semester of the capstone design experience. Industry best practices and tools are surveyed and applied in team projects. Students begin development on software projects proposed by faculty or external sponsors, including initial stages of design, implementation, and documentation, with an interim presentation of progress expected toward the end of the semester. Principles of security, testability, and maintainability are stressed.
Prerequisite(s): IT 705 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

IT 792 - Senior Project II
Credits: 2
Continuation of IT 971: Senior Project I. Students complete the project, a final presentation of results is expected toward the end of the semester. Successful completion of this course fulfills the Capstone Experience requirement for Information Technology majors.
Attributes: Writing Intensive Course
Prerequisite(s): IT 791 with a minimum grade of D-.
Equivalent(s): IT 710
Grade Mode: Letter Grading

Instructional Studies (INST) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

INST 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in instructional studies. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): INST 544G
Grade Mode: Letter Grading

INST 615 - Engaging Adult Learners in the Digital Age
Credits: 4
Educators and trainers often feel compelled to use the latest technologies in their teaching practice to keep pace with culture and attract learners. Yet technology for technology's sake doesn't automatically help learners meet learning outcomes and can have an unintended negative impact on learning experiences if not selected properly. This course will provide guided practice-based learning activities to develop the skills needed to review, analyze, and select appropriate educational technologies for engaging education experiences for adult learners in a variety of settings.
Equivalent(s): INST 615G
Grade Mode: Letter Grading

INST 701 - Teaching and Learning in Adulthood
Credits: 4
This course examines the nature and process of teaching and learning in adulthood by reviewing and building on theories and philosophies of adult learning. It focuses on teaching adults in formal, informal, and non-formal settings. Understanding cognition and the learning process provides the foundation to employing instructional strategies that empower the adult learner. Students will explore active learning, collaborative learning, self-directed learning in relationship to learning strategies, motivation and the importance of practice, experience, self-reflection, and assessment.
Attributes: Writing Intensive Course
Equivalent(s): INST 605G
Grade Mode: Letter Grading

INST 702 - The Learning Workplace
Credits: 4
This course deals with the professional learning needs and priorities of the workplace with an emphasis on business and industry settings. It examines the variety of ways in which employees and their managers gain new knowledge and skills as part of their on-going involvement in both their jobs and in formal, informal, and non-formal learning situations. Careful attention is given to understanding and applying effective transfer of learning strategies. The roles of in-house training, corporate university, individualized learning, distance learning, online learning, and external providers are also examined.
Attributes: Writing Intensive Course
Equivalent(s): INST 607G
Grade Mode: Letter Grading

INST 703 - Instructional Design and Interactive Learning
Credits: 4
This course provides an introduction to theory and practice of instructional design and its role in developing interactive learning. It covers all the necessary elements to analyze, design, develop, implement, and evaluate effective learning, including interactive learning systems, and cultivates the effective combination of technology and instruction. The course addresses the different models used to develop effective instruction and expands the student's understanding of how to facilitate meaningful connections in learning through collaboration, discovery, and engagement.
Equivalent(s): INST 610G
Grade Mode: Letter Grading

INST 797 - Program Development and Learning
Credits: 4
This course encompasses a broad spectrum of program development ranging from an individual course to a complete program of major learning activities conducted over a period of time for the education and training of adults. This project- based course serves as the Integrative Capstone and is designed to provide an opportunity to apply and practice theories, skills, and principles to a variety of situations adult educators may encounter in practice. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): INST 650G
Grade Mode: Letter Grading

Integrated Agriculture Management (IAG)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

No courses are currently active in the course inventory for this subject prefix.

Integrated Applied Mathematics (IAM)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

IAM 550 - Introduction to Engineering Computing
Credits: 4
An application driven introduction to computer-aided problem solving leveraging foundational knowledge in engineering and the physical sciences. Engineering applications are used to motivate the computational methods needed in scientific and engineering disciplines. Numerical methods, including the basic LU algorithm, one-dimensional root finding methods, and numerical differentiation and integration, are introduced as useful computational tools for tackling a broad range of engineering and scientific applications and to provide concrete and contextual programming experiences. MATLAB is used, with topics including scripts, functions, logical expressions, conditional statements, looping, data visualization, plotting, and recursion presented within the framework provided by both the numerical methods and the scientific or engineering problems. Laboratory included.
Prerequisite(s): MATH 426 (may be taken concurrently) with a minimum grade of D- or MATH 426H (may be taken concurrently) with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken MATH 445.
Grade Mode: Letter Grading

IAM 751 - Introduction to High-Performance Computing
Credits: 4
Course gives an introduction to select areas of high-performance computing, providing a basis for writing and working with high-performance simulation codes. The three main topics are: 1) basic software engineering, 2) high-performance and parallel programming, and 3) performance analysis and modeling. Additional topics may include hetergeneous architectures like GPUs and data analysis/visualization. Working knowledge of a compiled programming language (C, C+ or Fortran) is required prior to taking this course.
Grade Mode: Letter Grading

Intercollege (INCO)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

INCO 400 - Graduate Preparation Seminar
Credits: 1
A survey seminar that explores issues related to graduate school preparation. Topics include graduate school culture, academic research, the role of multicultural scholars, faculty relations, the graduate record exam, resume/vita development, and financing graduate education. Enrollment in McNair Scholars Program required.
Repeat Rule: May be repeated for a maximum of 2 credits.
Grade Mode: Credit/Fail Grading

INCO 403 - Healthcare Professions Seminar
Credits: 2
This seminar is designed for students (primarily for sophomores; juniors and seniors may also take the course) who are in the initial phase of preparation to a career in allopathic or osteopathic medicine, dentistry, podiatry, optometry, physicians assistant, chiropractics, physical therapy, pharmacy, or naturopathic medicine. Through readings and discussion students will become informed about current topics in healthcare, and specifically about these professions, requirements for admission to degree programs, and about how to become a competitive applicant.
Grade Mode: Credit/Fail Grading

INCO 425H - Honors/Calculus and Physics Recitation
Credits: 0
Recitation for MATH 425H and PHYS 407H.
Co-requisite: MATH 425H, PHYS 407H
Attributes: Honors course
Grade Mode: Letter Grading

INCO 426H - Honors/Calculus and Physics Recitation
Credits: 0
Recitation for MATH 426H and PHYS 408H.
Co-requisite: MATH 426H, PHYS 408H
Attributes: Honors course
Grade Mode: Letter Grading

INCO 490A - Fundamentals of Research Integrity
Credits: 2
Undergraduate students interested in conducting research or those already conducting research will explore individual, professional, institutional and social issues related to the ethical conduct of research and scholarship. Students will use case studies as well as share their research interests and experience to investigate topics of data management, authorship, mentorship, human subjects, use of vertebrate animals, and scientific integrity. Completion of this course and accompanying modules fulfill part of the NSF RCR training mandate and/or the USDA NIFA RCR training mandate.
Grade Mode: Credit/Fail Grading

INCO 501 - Peer Coach Introduction to Pedagogy
Credits: 1-2
This course provides an initial experience as an instructional peer coach. Students apply theories of cognition, group dynamics, learning, metacognition, and motivation to support other students as they learn science, engineering, and mathematics. Students reflect on their work as peer coaches through the lens of the required readings.
Grade Mode: Letter Grading

INCO 502 - Peer Learning Coach Development
Credits: 1
Development and assessment of leadership skills. Practical application of theories of cognition, group dynamics, learning, and motivation to helping other students learn. Requires class session, course content review session, and one weekly meeting with students.
Prerequisite(s): CHEM 501 with a minimum grade of D- or INCO 501 with a minimum grade of D-.
Grade Mode: Letter Grading

INCO 505A - Becoming a Problem Solver
Credits: 4
A hands-on course for students participating in Semester in the City (Boston) or Semester for Impact (NH) that builds the skills of students as changemakers for social good. Students participate in skill-building and reflective workshops designed around our core skills of launching a purpose driven career, working in diverse teams, persuasive communication and human centered problem solving. Students practice new concepts and skills every week and engage in team-based community research projects, craft a three-minute speech they deliver at program completion, and develop their professional on-line profile and portfolio of work.
Co-requisite: INCO 505B, INCO 505I
Grade Mode: Letter Grading
Special Fee: Yes

INCO 505B - Social Innovator's Toolbox
Credits: 4
A weekly seminar that exposes students to the field of social innovation through case studies, guest speakers, short readings, and interactive, student-led work. Through a series of field-tested assignments, or "deliverables", students are introduced to and practice applying different concepts and methods from social innovation, social entrepreneurship, sustainable development, nonprofit management, and social impact evaluation to their specific work in their internships.
Co-requisite: INCO 505A, INCO 505I
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

INCO 505I - Internship: Semester in the City (Boston) or Semester for Impact (NH)
Credits: 8
While participating in Semester in the City (Boston) or Semester for Impact (New Hampshire), students will intern with a nonprofit, social mission business, or government agency for 30 hours per week for a full-semester. Students will gain work-based experience, learning more about themselves and their interests while also building skills and networks. Students are matched with an internship based on a variety of factors. are paired with a dedicated mentor at the internship site, and focus on a special project throughout the semester.
Co-requisite: INCO 505A, INCO 505B
Grade Mode: Letter Grading

INCO 529 - Writing Consultation
Credits: 2
Includes instruction in philosophy and techniques of tutoring, theoretical and practical issues in collaborative learning and complex-skill formation, and cross disciplinary conventions of writing. In addition to the classroom portion of course, each student undertakes a supervised practicum experience in the University Writing Center.
Grade Mode: Credit/Fail Grading

INCO 585 - Foreign Exchange
Credits: 0-16
Undergraduates who meet UNH Study Away Eligibility Requirements and the requirements set by the host institution, may participate in an international exchange program at one of UNH's partner institutions for a semester or academic year. Students must achieve the equivalent of a 'C' or above to receive international transfer credit. For more information contact the Coordinator of Student Programs at the Center for International Education.
Attributes: World Cultures(Discovery)
Grade Mode: Credit/Fail Grading
Special Fee: Yes

INCO 586 - Foreign Exchange
Credits: 0-16
Undergraduates who meet UNH Study Away Eligibility Requirements and the requirements set by the host institution, may participate in an international exchange program at one of UNH's partner institutions for a semester or academic year. Students must achieve the equivalent of a 'C' or above to receive international transfer credit. For more information contact the Coordinator of Student Programs at the Center for International Education.
Attributes: World Cultures(Discovery)
Grade Mode: Credit/Fail Grading
Special Fee: Yes

INCO 588 - Study Abroad Experience - Semester
Credits: 0
A Study Abroad Program co-requisite to enroll students in travel insurance and capture the mandatory study abroad fee.
Grade Mode: Not graded
Special Fee: Yes

INCO 589 - Study Abroad Experience Short
Credits: 0
For students enrolling in short term study abroad experiences in Fall and Spring semesters. Also for students enrolling in January term and Summer Session study abroad experiences.
Grade Mode: Not graded
Special Fee: Yes

INCO 590 - Student Research Experience
Credits: 1-4
Provides hands-on research experience to develop critical thinking, problem solving, and analytical skills. An entry-level research experience that introduces students to research theories, tools, and ethical issues. Each student completes a contract with a faculty mentor identifying the research activities the student will undertake.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

INCO 610 - Research Inquiry Seminar
Credits: 2-6
With the notion of understanding self as the basis for investigating the world, this seminar focuses on exploring elementary concepts of academic research. Students are engaged in identifying strengths, discovering their passions, discerning the joys and frustrations of research, and developing a sketch of a research project. Enrollment in McNair Scholars Program required.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

INCO 620 - Talk to Action: Facilitating Deliberative Democracy
Credits: 2-4
A theory-to-practice seminar that explores democratic theory from a deliberative perspective, dialogue and small group facilitation, civic engagement and social justice. Topics include moral disagreement, skills in public engagement and facilitation, creating social change, and moving from talk to action in the public sphere.
Repeat Rule: May be repeated for a maximum of 6 credits.
Grade Mode: Credit/Fail Grading

INCO 682A - The Washington Center Career Readiness Seminar
Credits: 4
This seminar course (co-requisite to internship) provides internship participants with professional development and career coaching necessary to guide students through transition from academic to professional. Assignments will be collected into final portfolio which will demonstrate integrative learning.
Co-requisite: INCO 682I
Grade Mode: Letter Grading

INCO 682I - Washington DC Internship
Credits: 4 or 8
Internship Placement in Washington DC through The Washington Center program. 32 hours per week, sites vary based on student major and interest.
Co-requisite: INCO 682A
Grade Mode: Letter Grading

INCO 683 - Global Internship
Credits: 0-6
Enables students to pursue a global internship through a third party provider. Students must meet all university requirements and complete required forms. Interested students should consult the Global Education Office. (Financial aid requires a minimum of 6 credits.)
Grade Mode: Credit/Fail Grading
Special Fee: Yes

INCO 684 - Domestic Study Away
Credits: 0 or 16
For students enrolling in domestic study away experiences with third-party providers.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

INCO 685 - Study Abroad
Credits: 0-16
Enables students to pursue a semester, summer, or an academic year of foreign study in programs other than those offered by UNH. Students must provide the University Committee on Study Abroad with detailed information about the curriculum and must receive approval from that committee before registration. Credit awarded only upon successful completion of the course of study and after receipt by the committee of an official transcript. Interested students should consult the Center for International Education. (Financial aid requires a minimum of 6 credits.)
Attributes: World Cultures(Discovery)
Grade Mode: Credit/Fail Grading
Special Fee: Yes

INCO 686 - Study Abroad
Credits: 0-16
Enables students to pursue a semester, summer, or an academic year of foreign study in programs other than those offered by UNH. Students must provide the University Committee on Study Abroad with detailed information about the curriculum and must receive approval from that committee before registration. Credit awarded only upon successful completion of the course of study and after receipt by the committee of an official transcript. Interested students should consult the Center for International Education. (Financial aid requires a minimum of 6 credits.)
Attributes: World Cultures(Discovery)
Grade Mode: Credit/Fail Grading
Special Fee: Yes

INCO 687 - Study Abroad Experience
Credits: 0-16
Enables students to pursue a term of foreign study in programs other than those offered by UNH. Students must meet all university requirements and complete required forms. Credit awarded only upon successful completion of the course of study abroad and after receipt and processing of an official transcript. Interested students should consult the Center for International Education. (Financial aid requires a minimum of 6 credits.)
Grade Mode: Credit/Fail Grading
Special Fee: Yes

INCO 688 - Study Abroad Insurance Program
Credits: 0
Study Abroad Insurance Program.
Grade Mode: Not graded
Special Fee: Yes

INCO 699 - McNair Summer Internship
Credits: 0
McNair Fellows; not graded; Summer only.
Grade Mode: Not graded

INCO 710 - Introduction to McNair Research
Credits: 2-4
An Introduction to methods and techniques of research design within the social sciences, mathematics and natural sciences, and the humanities. Concepts are tailored to students' research thesis. Students design and construct a research project (execution of project may be allowed for additional credit). A comprehensive written proposal is required. Enrollment in McNair Scholars Program required. Special fee on study abroad sections.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading
Special Fee: Yes

INCO 790 - Advanced Research Experience
Credits: 1-4
Advanced research, scholarly or creative projects developed and conducted under the supervision of a faculty member. Provides students with the opportunity to apply advanced knowledge and techniques of their major to a specific problem or question. Significant preparatory course work for research, or other research experience approved by the INCO 790 faculty mentor required. INCO 790 may be repeated alone or in combination with INCO 590 for a maximum of 8 credits.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

INCO 791 - National Science Foundation Graduate Research Fellowship Preparation
Credits: 0
This course is designed to enable students to receive information, guidance, and support in applying for the National Science Foundation (NSF) Graduate Research Fellowship program (GRFP). Students will become familiar with the NSF, its mission, and the selection criteria for this fellowship. Through independent work and collaborative exercises, students will strengthen writing skills and develop a strong application.
Grade Mode: Credit/Fail Grading

INCO 795 - Washington Center Course
Credits: 4
Four-credit upper-level seminar course as co-requisite with The Washington Center internship program in Washington DC.
Co-requisite: INCO 682A
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

Interdisciplinary Studies (IDIS) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

IDIS 410 - College Success Seminar
Credits: 2
College Success Seminar provides the foundation for an informed and meaningful college experience. In the seminar, students discover how their individual capacities position them for the attainment of their goals within the academic community of the college. The course broadens understanding of key concepts common to integrative learning within higher education settings, particularly focusing on the ways multiple academic disciplines can improve success in applied careers. It empowers students to become informed users of information as well as engage in research and planning for subsequent courses. Students in this course will consider the ways various learning opportunities relate to one another and to the individual's personal, academic, and career goals. College Seminar fosters the self-awareness and intellectual perspective that are the hallmarks of well-educated persons and lifelong, engaged learners. For students in the AA General Studies program, this course will also guide students in developing their twenty credit academic concentration within the associate degree.
Equivalent(s): IDIS 502G
Grade Mode: Letter Grading

IDIS 560 - Research Methods in the Behavioral Sciences
Credits: 4
In this course, students will investigate research methods relevant to the behavioral sciences. Topics will include the scientific method, research ethics, behavioral measurement, experimental and nonexperimental research design, statistical analysis, and scientific writing. Students will apply knowledge of research design, ethics, scientific writing, and APA formatting to propose a viable empirical study to address a practical problem.
Attributes: Social Science (Discovery); Inquiry (Discovery); Writing Intensive Course
Prerequisite(s): (ENG 420 with a minimum grade of D- or ENG 500G with a minimum grade of D- or ENGL 401 with a minimum grade of D-) and (CRIT 501 with a minimum grade of D- or CRIT 501G with a minimum grade of D-) and (MTH 504 with a minimum grade of D- or MATH 504G with a minimum grade of D-) and (PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D- or CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D- or EDU 510G with a minimum grade of D- or EDC 500 with a minimum grade of D-).
Equivalent(s): IDIS 501G
Mutual Exclusion: No credit for students who have taken PSYC 502.
Grade Mode: Letter Grading

IDIS 601A - Interdisciplinary Seminar: Being Happy
Credits: 4
The goal of this final general education course is to explore complex themes related to the human experience by making connections across multiple academic disciplines. Several topics will be offered each term and all sections will provide students with the opportunity to hone their research, writing, and presentation skills. Students will use advanced problem-solving skills and methodologies to reflect on the section's topic, collaborate with peers, and investigate solutions using interdisciplinary research and analysis. The theme for this topic is Being Happy, which explores concepts of happiness from the disciplines of psychology, biology, sociology, and technology.
Attributes: Interdisciplinary Sem (Gen Ed); Writing Intensive Course
Prerequisite(s): ((COM 460 with a minimum grade of D- or COMM 542G with a minimum grade of D-) and (COM 480 with a minimum grade of D- or COMM 543G with a minimum grade of D-) and (MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D- or MTH 504 with a minimum grade of D- or MATH 504G with a minimum grade of D- or MATH at GSC or in transfer with a score of MET) and (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-)) or Has Accred Bachelor Deg with a score of WAIV or ((CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and Has Accred Associate Deg with a score of WAIV).
Equivalent(s): IDIS 601, IDIS 601G
Grade Mode: Letter Grading

IDIS 601B - Interdisciplinary Seminar: Business of Beer
Credits: 4
The goal of this final general education course is to explore complex themes related to the human experience by making connections across multiple academic disciplines. Several topics will be offered each term and all sections will provide students with the opportunity to hone their research, writing, and presentation skills. Students will use advanced problem-solving skills and methodologies to reflect on the section's topic, collaborate with peers, and investigate solutions using interdisciplinary research and analysis. The theme for this topic is the Business of Beer, and explores themes ranging from beer culture to the beer industry to sustainability.
Attributes: Interdisciplinary Sem (Gen Ed); Writing Intensive Course
Prerequisite(s): ((COM 460 with a minimum grade of D- or COMM 542G with a minimum grade of D-) and (COM 480 with a minimum grade of D- or COMM 543G with a minimum grade of D-) and (MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D- or MTH 504 with a minimum grade of D- or MATH 504G with a minimum grade of D- or MATH at GSC or in transfer with a score of MET) and (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-)) or Has Accred Bachelor Deg with a score of WAIV or ((CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and Has Accred Associate Deg with a score of WAIV).
Equivalent(s): IDIS 601, IDIS 601G
Grade Mode: Letter Grading

IDIS 601C - Interdisciplinary Seminar: Paranormal Activities
Credits: 4
The goal of this final general education course is to explore complex themes related to the human experience by making connections across multiple academic disciplines. Several topics will be offered each term and all sections will provide students with the opportunity to hone their research, writing, and presentation skills. Students will use advanced problem-solving skills and methodologies to reflect on the section's topic, collaborate with peers, and investigate solutions using interdisciplinary research and analysis. The theme for this topic is Paranormal Activities which explores the unknown from multiple disciplines such as sociology, history, and psychology.
Attributes: Interdisciplinary Sem (Gen Ed); Writing Intensive Course
Prerequisite(s): ((COM 460 with a minimum grade of D- or COMM 542G with a minimum grade of D-) and (COM 480 with a minimum grade of D- or COMM 543G with a minimum grade of D-) and (MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D- or MTH 504 with a minimum grade of D- or MATH 504G with a minimum grade of D- or MATH at GSC or in transfer with a score of MET) and (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-)) or Has Accred Bachelor Deg with a score of WAIV or ((CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and Has Accred Associate Deg with a score of WAIV).
Equivalent(s): IDIS 601G
Grade Mode: Letter Grading

IDIS 797 - Integrative Capstone: Project in Interdisciplinary Studies
Credits: 4
This capstone course for the Individualized Studies major builds on previous study in the field and provides an opportunity to apply learning in an in-depth project. Projects must employ applied research, demonstrate knowledge of key concepts and theories, and integrate reflection on developments within this chosen area of study. Students synthesize their knowledge of theory and practice to develop and implement a project in their own area of professional interest. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Grade Mode: Letter Grading

International Affairs (IA)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

IA 401 - Foundations of International and Global Studies
Credits: 4
The world's most pressing political, environmental, and socio-economic challenges lack clear or easy resolutions. This course provides students with a broad, interdisciplinary engagement of key challenges in international affairs. Students will learn how to analyze complex international issues, ranging from topics such as climate change, trade and technology, global pandemics, and war and conflict. As the introductory course to the International Affairs and Global Studies programs, this course provides foundational knowledge and analytical skills to make sense of ongoing issues an in interconnected world. Required for the International Affairs and Global Studies majors and minor. IA 401 should be completed before the international experience, preferably during the 1st or 2nd year of study.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

IA 501 - From Ideas to Evidence: Researching Global Issues
Credits: 4
How do we study and make evidence-informed arguments in international affairs? This course is designed to familiarize students with conceptual foundations and methodological approaches in international affairs. Students will learn how to break down complex topics into a feasible independent research project. Topics vary with faculty expertise, and have included war and political violence, global environmental issues, social mobilization and protest, and development, race, and gender. IA 501 prepares students for their international experience and their capstone project in IA 701. This course is normally taken before the international experience and is required before enrollment in IA 701.
Attributes: Writing Intensive Course
Prerequisite(s): IA 401 with a minimum grade of D-.
Grade Mode: Letter Grading

IA 695 - Independent Study in IA
Credits: 2-4
Faculty supervised independent Study in International Affairs.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

IA 701 - Investigating the World: Seminar in International Affairs and Global Studies
Credits: 4
As the capstone seminar in International Affairs and Global Studies, this course explores important topics in international affairs through individualized research projects and collective study of important topics in international affairs. Students learn how to investigate global issues, analyze their manifestations in different social, cultural, economic, and political contexts, and formulate new insights and policy recommendations. Drawing upon their international experience, second language skills, and other IA course work, students complete individual capstone research projects, through which they learn how to generate empirical research and explore real-world applications of research findings.
Attributes: Writing Intensive Course
Prerequisite(s): IA 401 with a minimum grade of D- and IA 501 with a minimum grade of D-.
Grade Mode: Letter Grading

Italian (ITAL)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ITAL 401 - Elementary Italian I
Credits: 4
For students without previous training in Italian. Aural comprehension, speaking, writing, reading, (No credit for students who have had two or more years of Italian in secondary school; however, any such students whose studies of Italian have been interrupted for seven years should consult the Program Coordinator about possibly receiving credit).
Grade Mode: Letter Grading

ITAL 402 - Elementary Italian II
Credits: 4
For students who have completed ITAL 401 or an equivalent. Aural comprehension, speaking, writing, reading. (No credit for students who have had two or more years of Italian in secondary school; however, any such students whose studies of Italian have been interrupted for seven years should consult the Program Coordinator about possibly receiving credit).
Attributes: Foreign Language Requirement
Grade Mode: Letter Grading

ITAL 425 - Introduction to Italian Studies
Credits: 4
This course explores Italian culture and society and examines the role of Italian art, cuisine, literature and history via readings, films, music, and lectures. What makes Italy Italy? What does it mean to be Italian? How do phenomena such as regionalism, the Mafia, and the European Union shape our understanding of contemporary Italy? The course analyzes the interactions among culture, politics, history, and society as a means of defining national identity.
Attributes: World Cultures(Discovery)
Equivalent(s): ITAL 425H
Grade Mode: Letter Grading

ITAL 444A - Italians Come to America: Representing Emigration and Immigration on Both Sides of the Atlantic
Credits: 4
Course is designed around the phenomenon of emigration from Italy to the United States over the last century or so, with particular attention to the time period between the end of the nineteenth century and the mid-twentieth century. While core media under examination are literature and film, we also draw on historical, anthropological, political and sociological readings to help us consider the many issues involved.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

ITAL 444B - Mamma Mia! Italian Motherhood from the Virgin Mary to Carmela Soprano
Credits: 4
This course examines motherhood and the special role of the Italian mother - la mamma italiana - in past and present italian society. Through readings from a wide variety of disciplines - theology, history, medicine, and literature - as well as an examination of art and film, we will analyze the origins and conflicted nature of Italian attitudes toward motherhood. Topics include: maternal love and self-sacrifice, beliefs about generation and their influence on maternal and paternal roles, Italian family structure. Mussolini's promotion of motherhood, the phenomenon of mammismo or "Mama's boys", and Italian-American mothers, including Carmela Soprano.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

ITAL 503 - Intermediate Italian I
Credits: 4
For students who have completed ITAL 402 or an equivalent. A complete review of the fundamentals of grammar and syntax. Selected readings as a general introduction to Italian civilization and culture. Films and activities.
Attributes: World Cultures(Discovery); Writing Intensive Course; Foreign Language Requirement
Grade Mode: Letter Grading

ITAL 504 - Intermediate Italian II
Credits: 4
For students who have completed ITAL 503 or an equivalent. A review of the fundamentals of grammar and syntax. Selected readings as a general introduction to Italian civilization and culture. Films and activities.
Attributes: World Cultures(Discovery); Writing Intensive Course; Foreign Language Requirement
Prerequisite(s): ITAL 503 with a minimum grade of D-.
Grade Mode: Letter Grading

ITAL 510J - Rome: The Eternal City in Italian Culture
Credits: 4
This course offers an interdisciplinary introduction to the Eternal City and its role in Italian culture from the Middle Ages to the present. Together, the online and on-site components of the course allow students to compare their theoretical historical, social and artistic knowledge of Italian culture (acquired through readings, films and online lectures) with experiential knowledge gained through first-hand exposure to contemporary Rome. All readings in English. Fulfills the World Cultures Discovery requirement.
Co-requisite: INCO 589
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ITAL 522 - Modern and Contemporary Italian Culture
Credits: 4
This course explores the culture and society of modern and contemporary Italy through major works of fiction and non-fiction. In examining the emergence of the new nation-state, the course poses such questions as: What does "We have made Italy; now we need to make the Italians" mean? What is Fascism? What is "la dolce vita?" How have climate change and the refugee crisis changed Italy and Italians? The unification of Italy, colonialism, Fascism, Made in Italy, La Dolce Vita, domestic terrorism, North vs South are some of the topics examined. No prerequisites and all work is in English.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

ITAL 525 - Italian Cinema
Credits: 4
Italian Cinema is a survey of the development of the film industry in Italy and of major Italian films. Through film, the course explores the culture, society, history, and politics of Italy, as well as the aesthetics, technology, economics, and theory of cinema. No prerequisites and all work is in English.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

ITAL 526 - The Art of Cinema in Italy
Credits: 4
While studying in Italy students explore the relationship between cinema as art, the reception and distribution of films cinema historiography (including archives), and technology. Students read about movements, directors, and expectations of genre, and identify connections between artistic concerns and the technology involved in making, preserving and restoring films. Students visit the Cineteca di Bologna and attend the annual Cinema Ritrovato film festival.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

ITAL 552 - Race, Gender and Identity in the Renaissance
Credits: 4
How were race and gender understood in the Renaissance? How did differential social power influence culture while impacting daily life? How might this relate to race and gender in American culture today? This course explores the various ways race, gender, and other forms of identity were represented in Renaissance literary and artistic works, and how literature, theater and art can impact culture, politics, and society, especially in Renaissance Italy and the contemporary United States.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

ITAL 553 - Containing Difference: Race and Identity in Contemporary Italy
Credits: 4
This course explores how marginality, difference, and memory intersect in the Black, Jewish, and Slav communities of contemporary Italy. Through analysis of literary texts, film, and historical representation, students will map points of connection between representations of the Holocaust, violence along Italy's eastern borderland, Italian colonialism, and contemporary migration to Italy across the Mediterranean. These connections are not intended to suggest historical equivalency but rather an opportunity to "think together" different histories of violence and explore how the legacies of colonialism, antisemitism, and racism intertwine in Italy.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

ITAL 595 - Practicum
Credits: 2
Practical use of Italian language and culture through special projects outside the classroom.
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): ITAL 595A
Grade Mode: Credit/Fail Grading

ITAL 631 - Advanced Conversation and Composition I
Credits: 4
Rapid review of basic grammatical structures and in-depth study of more complex linguistic patterns. Vocabulary building. Frequent written compositions and oral presentations using materials on contemporary culture taken from the various media. Phonetics and oral/aural skills development. May be repeated barring duplication of subject.
Attributes: World Cultures(Discovery); Writing Intensive Course; Foreign Language Requirement
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

ITAL 632 - Advanced Conversation and Composition II
Credits: 4
Advanced spoken and written Italian to attain aural-oral fluency. Advanced reading and composition. May be repeated barring duplication of subject.
Attributes: World Cultures(Discovery); Writing Intensive Course; Foreign Language Requirement
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

ITAL 635 - Italian Food Studies
Credits: 4
Italian Food Studies acquaints students with the principles of aesthetics as they pertain to our understanding of and relationship to food. The philosophical aspects of the course are complemented by experiential components that emphasize the particularity as well as the diversity of the Italian regions.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

ITAL 651 - Introduction to Italian Culture and Civilization I: Middle Ages, Renaissance, Baroque
Credits: 4
Survey of major representative writers and artists, studied against the backdrop of social and cultural history. Dante, Petrarch, Boccaccio, Machiavelli, Marino. (Not offered every year).
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

ITAL 652 - Introduction to Italian Culture and Civilization II: Age of Enlightenment, Romanticism, Modernism
Credits: 4
Survey of major representative writers and artists, studied against a backdrop of social and cultural history. Parini, Goldoni, Leopardi, Manzoni, Pavese, Calvino. (Not offered every year).
Attributes: Writing Intensive Course
Prerequisite(s): ITAL 631 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

ITAL 675 - Special Topics in Italian Studies
Credits: 4
Topics drawn from all aspects and periods of Italian Studies. May be repeated for credit barring duplication of materials.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

ITAL 681A - Ancient and Medieval Italy
Credits: 4
Taking an interdisciplinary, but historically centered perspective, this course examines the construction of Italy as both a nation and culture from the pre-Roman period to the fifteenth century.
Attributes: Historical Perspectives(Disc)
Equivalent(s): ITAL 681B
Grade Mode: Letter Grading

ITAL 681B - Ancient and Medieval Italy
Credits: 4
Taking an interdisciplinary, but historically centered perspective, this course examines the construction of Italy as both a nation and culture from the pre-Roman period to the fifteenth century.
Attributes: Humanities(Disc)
Equivalent(s): ITAL 681A
Grade Mode: Letter Grading

ITAL 682B - Italian Culture: Early Modern, Modern and Contemporary
Credits: 4
Taking an interdisciplinary, but humanistically-centered perspective, this course examines the construction of Italy as both a nation and culture from the fifteenth century to the contemporary era.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

ITAL 683 - UNH in Bologna Summer Program
Credits: 0-8
This is an administrative placeholder course for the UNH in Bologna summer program. Students can be registered for both this administrative course number and the course number(s) of course(s) being offered on site.
Co-requisite: INCO 589
Attributes: Foreign Language Requirement
Grade Mode: Credit/Fail Grading
Special Fee: Yes

ITAL 701W - Capstone Course
Credits: 4
Students will investigate the intersections of the fields of Classics, Humanities, and Italian Studies through the exploration of a common theme. Working across disciplines, students will learn how scholars from these fields have approached common issues. Students will also demonstrate their ability to conduct research by engaging in a semester-long specialized project connected to the course theme.
Attributes: Writing Intensive Course
Equivalent(s): CLAS 701W, HUMA 701W
Grade Mode: Letter Grading

ITAL 775 - Topics in Literary & Cultural Studies
Credits: 4
Advanced course on a literary/cultural topic. Possible topics include African Italian Literature, Dante, Poetry, Theatre, Italy and the European Union, Social & Political Movements, Environment, Sustainability, Film. Barring duplication of subject, the course may be repeated for credit.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

ITAL 795 - Independent Study in Italian Language and Literature
Credits: 1-4
Individual guided study.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

ITAL 796 - Independent Study in Italian Language and Literature
Credits: 1-4
Individual guided study in Italian.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

Japanese (JPN)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

No courses are currently active in the course inventory for this subject prefix.

Justice Studies (JUST)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

JUST 401 - Introduction to Justice Studies
Credits: 4
Overview of justice studies as the study of law and law-like systems. Includes literature from both the law and society, and criminology. Topics will include morality versus legality, the American legal civil and criminal system, torts, and adult versus juvenile justice.
Grade Mode: Letter Grading

JUST 405 - Technology, Crime, and Society: A Forensic Exploration of High-Tech and Digital Crime
Credits: 4
This course addresses the ways in which technology, crime, and law converge in the wider society in the twenty-first century. While emerging technologies bring great benefits, they also bring unintended and unforeseen consequences. This course uses a social science orientation to explore a new and evolving field of forensic technology.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

JUST 410 - Sexual Harassment and Rape Prevention (SHARPP) Peer Advocacy
Credits: 2-4
SHARPP Peer Advocacy is designed to provide the training and development of peer advocates to work directly with survivors of interpersonal violence while staffing SHARPP's 24/7 support line. Under NH state law (NH RSA 173:C), to have confidentiality as an advocate, individuals must successfully complete a minimum of 30-hours of specialized training and complete 6 hours of annual continuing education. This course will give students the basic understandings and skills needed to serve as a peer advocate, though is not meant to be the only training they receive in this role or as a comprehensive overview of all information needed to work with survivors.
Grade Mode: Letter Grading

JUST 501 - Research Methods
Credits: 4
Overview of the various methodologies used in justice studies research: quantitative, qualitative, and legal. Topics include issues of design such as ethics, reliability, and validity measurement. Students will design and write up research proposals using one of the methods reviewed in the course.
Attributes: Inquiry (Discovery)
Prerequisite(s): ADMN 510 with a minimum grade of C- or MATH 439 with a minimum grade of C- or MATH 644 with a minimum grade of C- or PSYC 402 with a minimum grade of C- or SOC 402 with a minimum grade of C-.
Grade Mode: Letter Grading

JUST 505 - Breaking Down Breaking Bad: The Analysis of Hollywood Crime and Justice
Credits: 4
In this course, we will consider the intersections of justice studies, crime/delinquency, policy/law, and media. Employing case studies, we will critically analyze depictions of crime, criminals, and law enforcement in popular culture. Specific attention is placed to the following areas: the social construction of crime and justice; the structure and influence of media; and the implications of media portrayals of crime and justice; the structure and influence of media; and the implications of media portrayals of crime for policy, law, and our understandings of deviance. You are invited to explore a multitude of theories, ideas, and research as you learn about this dynamic field of study.
Grade Mode: Letter Grading

JUST 520 - Girls Gone Bad: Delinquent Girls in Cultural Context
Credits: 4
This course explores the important and under-studied intersection between gender/girls and delinquency. Who is the typical female delinquent? What causes her to get into trouble? What happens to her if she is arrested? Topics include the extent and nature of adolescent girl's delinquency and theoretical explanations for delinquency. Focus on social contexts (family, peers, school), developmental and social psychological factors and adolescent girls' experiences with the juvenile system.
Grade Mode: Letter Grading

JUST 535 - Homicide
Credits: 4
Introduces to theory and research in homicide studies, including a review of the origins of and social responses to homicide.
Equivalent(s): SOC 535
Grade Mode: Letter Grading

JUST 550 - Mock Trial
Credits: 2
Participation in American Mock Trial Association intercollegiate competition. Study and preparation for trial of national case (criminal or civil, alternate years). Year long course, 2 credit hours per semester.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading
Special Fee: Yes

JUST 551 - Mock Trial
Credits: 2
Participation in American Mock Trial Association intercollegiate competition. Study and preparation for trial of national case (criminal or civil, alternate years). Year long course, 2 credit hours per semester.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading
Special Fee: Yes

JUST 591 - Forensic Psychology
Credits: 4
Forensic psychology is one of the fastest growing sub-fields in psychology and in fact one of the fastest growing disciplines in the world of social science. Still, most people in the general population as well as many individuals within the study of psychology know very little about what forensic psychology actually is. This course is designed to cover the various roles and issues that constitute the science of forensic psychology and to help student deepen their understanding of the various roles forensic psychologists play in the real world. Needless to say, this course will not train you to be a forensic psychologist, but hopefully it will spark your interest about a very exciting topic and encourage you to study some of the issues we touch on, as you move on academically.
Grade Mode: Letter Grading

JUST 595 - Special Topics
Credits: 1-4
Special topics of advanced study in Justice Studies. Selected offerings reflect faculty expertise in teaching and research. May be repeated in different topic areas.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

JUST 601 - Internship
Credits: 4
Weekly class meeting and a semester-long field internship in justice studies (e.g., law enforcement, corrections, victim advocacy, criminal or civil courts etc.) or a research internship working with a UNH faculty member or in a campus research lab (e.g., Crimes against Children's Lab, Prevention Innovations Research Center etc.) Placement must be approved by the justice studies internship coordinator. 155 internship hours required.
Grade Mode: Letter Grading

JUST 701 - Senior Seminar
Credits: 4
Advanced material in which the instructor has specialized knowledge through research and study. Topics may include the death penalty, terrorism, psychology of the jury, ethics and morality, immigration, therapeutic jurisprudence, and juveniles tried as adults.
Attributes: Writing Intensive Course
Prerequisite(s): JUST 401 with a minimum grade of C-.
Grade Mode: Letter Grading

JUST 795 - Reading and Research
Credits: 1-4
An independent study that is arranged by the student and supervised by a Justice Studies faculty member. Course requirements include: assembling and reading a substantial bibliography in the field; completing several written assignments and in some cases participating in hands-on experiences such as data collection and analysis. This course is by permission only and requires a signed agreement/proposal prior to registration. May be taken for 1-4 credits and includes a minimum of 3 hours of coursework per week per credit hour. Writing intensive in some select cases.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading

Kinesiology (KIN)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

KIN 501 - First Aid: Responding to Emergencies
Credits: 1
Covers the American Heart Association HeartSaver First Aid/CPR/AED: Adult, Child, Infant curriculum, the National Association of EMTs Bleeding Control for the Injured (BCon) curriculum which meets the Department of Homeland Security's Stop the Bleed initiative, and training for civilian responses to critical incidents.
Repeat Rule: May be repeated for a maximum of 2 credits.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

KIN 505 - Activity, Injuries and Disease
Credits: 4
Sports and exercise are a part of American society and are used as entertainment, leisure activity as well as a means to better health. Unfortunately while we partake in these activities few individuals are aware of the risks they are exposing themselves to. In addition as more women engage in sports and exercise medical science is realizing that many conditions and injuries are gender specific. It is well known that women athletes deal with reproductive, orthopedic and nutritional issues that differ greatly from men. Also we know that individuals with varying diseases benefit greatly from exercise. This course will join, musculoskeletal anatomy, injuries, gender and special problems together to explain how an individual can enjoy activities safely. In addition this course addresses the interpretation of current medical literature and how to utilize new information.
Attributes: Biological Science(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

KIN 585 - Emergency Medical Responder
Credits: 4
Standards of practice that conform to the content of the US Department of Transportation curriculum for Emergency Medical Responder (EMR). Initial evaluation and stabilization of patients at the scene of medical emergencies, CPR, and other basic medical care for illness and injury. Prepares the student for the National Registry of EMT(NREMT)EMRcertifications exams. (Note: this is a different level of certification than Emergency Medical Technician (EMT). KIN 684 and KIN 685 prepares students for EMTcertification).
Co-requisite: KIN 585L
Grade Mode: Letter Grading

KIN 585L - Emergency Medical Responder Lab
Credits: 1
Standards of practice that conform to the content of the US Department of Transportation curriculum for Emergency Medical Responder (EMR). Initial evaluation and stabilization of patients at the scene of medical emergencies, CPR, and other basic medical care for illness and injury. Prepares the student for the National Registry of EMT(NREMT)EMRcertifications exams. (Note: this is a different level of certification than Emergency Medical Technician (EMT). KIN 684 and KIN 685 prepares students for EMTcertification).
Co-requisite: KIN 585
Grade Mode: Letter Grading
Special Fee: Yes

KIN 652 - Clinical Kinesiology
Credits: 4
The science of human movement from biomechanical, neuromuscular, and anatomical perspectives; human muscular, joint, and connective tissue anatomy; and actions of skeletal muscles are detailed.
Prerequisite(s): BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-.
Grade Mode: Letter Grading

KIN 653A - Musculoskeletal Assessment
Credits: 2
Principles and methodology of joint range of motion, body mechanics, and muscle strength evaluation. Uses muscle palpation, goniometry, manual muscle testing, hand-held dynamometry to facilitate understanding of musculoskeletal anatomy and assessment.
Prerequisite(s): BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

KIN 668 - Ergogenic Aids in Sports
Credits: 2
In sports, faster, higher, stronger, longer, and better is what everyone wants. Athletes and coaches seek out sports ergogenics that will give them a training and performance advantage over their competition. This course introduces the use of sports ergogenics and their use in athletic competition.
Equivalent(s): AT 668
Grade Mode: Letter Grading

KIN 684 - Emergency Medical Care: Emergency Medical Technician (EMT)
Credits: 4
Based on the curriculum established by the U.S. Department of Transportation for Emergency Medical Technician, and authorized by the State of New Hampshire-Bureau of Emergency Medical Services (EMS). Topics covered include trauma; medical, environmental and psychiatric emergencies; childbirth; hazardous materials; and infection control procedures. Students participate in clinical observations in one of the region's hospital emergency departments. Students have the option to take the state of NH-EMS Practical Examination and the National Registry Written Examination for EMT. Passage of both these examinations leads to national certification as an EMT.
Co-requisite: KIN 685
Prerequisite(s): ANSC 511 (may be taken concurrently) with a minimum grade of D- or ANSC 512 (may be taken concurrently) with a minimum grade of D- or ZOOL 401 (may be taken concurrently) with a minimum grade of D- or BMS 507 (may be taken concurrently) with a minimum grade of D- or BMS 508 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

KIN 685 - Emergency Medical Care: EMT Lab
Credits: 2
Basic emergency health care, including trauma patients, medical and environmental emergencies, and childbirth. Includes clinical experience with a local hospital and ambulance service. Prepares the student for the National Registry of EMT's Examination.
Co-requisite: KIN 684
Prerequisite(s): (ANSC 511 (may be taken concurrently) with a minimum grade of D- and ANSC 512 (may be taken concurrently) with a minimum grade of D-) or ZOOL 401 (may be taken concurrently) with a minimum grade of D- or (BMS 507 (may be taken concurrently) with a minimum grade of D- and BMS 508 (may be taken concurrently) with a minimum grade of D-) or ZOOL 401 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

KIN 690 - Study Abroad in Kinesiology
Credits: 4
This course offers students the opportunity to explore cultural experiences through the international kinesiology landscape and gain new perspectives on the role of the kinesiology industry (Exercise Science, Health & Physical Education, Health Sciences, Sport Management & Leadership, or Kinesiology) in both American and other societies.
Co-requisite: INCO 588
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

KIN 693 - Teaching Assistantship
Credits: 2
A) Physical Education Pedagogy; B) Exercise Leader; C) Outdoor Education; D) Science Labs; E) Cardiac Rehabilitation; F) Coaching. Students serve as teaching assistants in assigned class activities. Assignments to be made by the class instructor may include teaching assistants' and administrative duties. May take two different sections.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

KIN 696 - Independent Study
Credits: 2-4
An advanced, individual scholarly project under the direct supervision of a faculty member.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading
Special Fee: Yes

KIN 696W - Independent Study
Credits: 2-4
An advanced, writing-intensive, individual scholarly project under the direct supervision of a faculty member. Student and Faculty Adviser will prepare a written proposal that outlines: the questions to be pursued, the methods of investigation, the student's qualifications to conduct the research, the nature of the finished written product (e.g. case study, position paper, extended lab report). This proposal must be approved by major faculty and the department chair prior to the student's registration for KIN 696 WI. All KIN 696 WI projects must include: Some forms of informal, ungraded writing such as a journal, reading summaries, draft chapters, or invention activities. Regular writing interaction between student and faculty adviser (i.e. at least weekly or biweekly), to include written feedback from the adviser. A finished product that is polished via revision. Faculty sponsors and students should consult the resources and guidelines of the UNH Writing Program.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): KIN 770W
Grade Mode: Letter Grading
Special Fee: Yes

KIN 706 - Neurology
Credits: 4
Development, morphology, internal configuration, physiology, histology, function, and pathology of the human nervous system.
Co-requisite: KIN 707
Prerequisite(s): BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-.
Grade Mode: Letter Grading

KIN 707 - Neurology Lab
Credits: 2
Basic histology, neuroanatomy and neurophysiology of the human nervous system. Use of brain specimens, videos and pathology case studies to elucidate cell structure, sensory and motor systems, and spinal cord, brainstem and cortical organization and anatomy.
Co-requisite: KIN 706
Prerequisite(s): (BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-) or COMM 521 with a minimum grade of D-.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

KIN 770W - Research Methods in Kinesiology
Credits: 4
The focus of this course will be the process of conducting research, starting with the development of the research question and working through issues associated with methodology, data collection, analysis, and interpretation. The course will examine research traditions commonly employed in investigations in exercise science, health sciences, health & physical education, and sport management and leadership: group comparison designs, historical research, and behavioral analysis (single subject design). The goal of this course is to prepare students to conduct research and understand the components of the process.
Attributes: Honors course; Writing Intensive Course
Equivalent(s): EXSC 696W, KIN 696W
Grade Mode: Letter Grading

KIN 798 - Special Topics
Credits: 1-4
New or specialized courses not normally covered in regular course offerings. Special fee on some sections.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Languages, Literatures & Cultures (LLC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

LLC 444I - US Latinx Cities: Urban Culture, Society and Space
Credits: 4
This course will explore urbanism of four US Latinx Cities: Los Angeles, Chicago, Miami, and New York. We will examine how Hispanics have historically shaped and changed the landscape of each of these cities in the United States through various forms of cultural production such as literature, music, film and television as well as discuss the social issues that these cities and communities face such as social inequality, gentrification, race relations, sexuality/gender, and transportation.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

LLC 525 - Topics in World Cultures
Credits: 4
Topical examination of world cultures and cultural history across global regions. Topics might include histories of migration, sports, environmental movements, political movements, pop culture, etc. Conducted in English.
Attributes: World Cultures(Discovery); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

LLC 535A - Professional Culture in Europe
Credits: 4
Conducting business with countries of Europe. The course focuses on the central role played by professional culture and business practices in the global marketplace.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

LLC 540 - Film History
Credits: 4
Examines the historical development of film from a global perspective and the emergence of national cinemas as well as the cross-cultural influences that have produced the modern transnational film industry.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

LLC 552 - Comparative Literature: Masterpieces of World Literature II
Credits: 4
Comparative studies of major authors representative of important periods of literary achievement. Renaissance to modern. Studies the age of empires through the colonial and post colonial periods. Introduction to various concepts of literature and genre. Topics and approaches may vary from semester to semester.
Attributes: Humanities(Disc); Writing Intensive Course
Grade Mode: Letter Grading

LLC 555 - Discover Cuba: An Arts Experience
Credits: 4
This discovery course is designed to provide students with first-hand experience of the art, history, culture, music and visual arts of Cuba. The course combines an online academic class with on-site experiential learning though a fourteen day trip to Cuba. The course takes a highly contextual approach, locating the artwork in its historical, social, economic and cultural context for students to analyze and understand the complexities of modern Cuba.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

LLC 560 - Divine Madness and Dangerous Minds! - Mental Health in Literature and Art
Credits: 4
Analysis and interpretation of art, literature, film, and various other representations of mental health and 'madness' from across the globe. Discussions of 'madness' are informed by artistic, medical, theoretical, political, and historical perspectives.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

LLC 595 - Language Practicum
Credits: 2-4
Practical use of language skills outside the classroom through special projects.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

LLC 790 - World Languages Capstone
Credits: 4
The World Languages capstone consists of a semester-long exploration of the language learning enterprise, study of life-long language learning strategies, reflection on intercultural competence, and development of comprehensive digital portfolio, including a reflection on the course of study and a language assessment as well as a culminating project.
Grade Mode: Letter Grading

LLC 791 - Methods of Foreign Language Teaching
Credits: 4
Objectives, methods and techniques in teaching foreign languages from elementary grades through college. Discussion, demonstration, preparation of instructional materials, micro-teaching of the language skills, including developments in computer-aided instruction.
Equivalent(s): SPAN 791
Grade Mode: Letter Grading

Latin (LATN)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

LATN 401 - Elementary Latin I
Credits: 4
Explore the world of the ancient Romans by learning the basic elements of Latin: the alphabet, vocabulary and grammar. By the end of the first semester students will be prepared to read short adapted passages on the history, mythology and culture of the Romans and the many cultures that they were associated with. Ideal preparation for exploration in politics, legal studies, music, myth/religion, theology, philosophy, medicine and the history of science.
Grade Mode: Letter Grading

LATN 402 - Elementary Latin II
Credits: 4
A continuation of LATN 401, this course expands students' abilities to read simple to moderately complex Latin passages, furthering their insights into the fascinating history and culture of the ancient Romans.
Attributes: Foreign Language Requirement
Grade Mode: Letter Grading

LATN 503 - Intermediate Latin I
Credits: 4
Review. Readings from Cicero, Caesar, Sallust, Livy, Catullus, Horace, Ovid, Plautus, Terence, and Seneca.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Grade Mode: Letter Grading

LATN 504 - Intermediate Latin II
Credits: 4
Review. Readings from Cicero, Caesar, Sallust, Livy, Catullus, Horace, Ovid, Plautus, Terence, and Seneca.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Grade Mode: Letter Grading

LATN 605 - Readings in Latin Literature
Credits: 4
Reading and analysis of major works of Latin literature. Focus on improving translation skills and comprehension of Latin grammar and Latin language. Introduction to the critical analysis of Latin literature in the context of Roman civilization and culture. Satisfies foreign language requirement.
Attributes: Foreign Language Requirement
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 1 time.
Grade Mode: Letter Grading

LATN 606 - Readings in Latin Literature
Credits: 4
Reading and analysis of major works of Latin literature. Focus on improving translation skills and comprehension of Latin grammar and Latin language. Introduction to the critical analysis of Latin literature in the context of Roman civilization and culture. Satisfies foreign language requirement.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 1 time.
Grade Mode: Letter Grading

LATN 753 - Advanced Studies in the Literature of the Golden Age
Credits: 4
A) Lucretius; B) Catullus; C) Caesar; D)Sallust; E) Vergil; F) Horace; G) Tibullus; H) Propertius; I) Ovid; J) Livy. Major Roman authors from the dictatorship of Sulla to the death of Augustus. Each special topic may be repeated two times for up to eight credits.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 1 time.
Grade Mode: Letter Grading

LATN 754 - Advanced Studies in the Literature of the Golden Age
Credits: 4
A) Lucretius; B) Catullus; C) Caesar; D)Sallust; E) Vergil; F) Horace; G) Tibullus; H) Propertius; I) Ovid; J) Livy. Major Roman authors from the dictatorship of Sulla to the death of Augustus. Each special topic may be repeated two times.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

LATN 755 - Advanced Studies in the Literature of the Silver Age
Credits: 4
A) Seneca the Younger; B) Persius; C) Petronius; D) Lucan; E) Statius; F) Quintilian; G) Martial; H) Juvenal; I) Tacitus; J) Pliny the Younger. Major Roman authors from the reign of Nero to the death of Trajan. Each special topic may be repeated two times.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Leadership (LD) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

LD 600 - Becoming an Effective Leader
Credits: 4
This course is focused on the strengths and characteristics of effective leaders. Topics may include self-leadership, the difference between leadership and management, the importance of communication, trust, team building, systems leadership, change leadership and conflict resolution. Students may illustrate the value of diversity, systems leadership, change leadership and conflict resolution within teams and organizations, as well as assess personal leadership styles and the leadership of others.
Attributes: Writing Intensive Course
Equivalent(s): LD 600G
Grade Mode: Letter Grading

LD 660 - Leadership Theory
Credits: 4
This course guides participants in developing lifelong learning skills for leadership that apply to any organizational level in a wide variety of environments. Both historical and current leadership theory and practice are explored. By taking an active leadership role in this course, students examine the issues, challenges, and practical skills of leadership in today's workplace. Presentations, team activities, reflection, interviewing, and feedback may be activities of developmental components within the course.
Prerequisite(s): LD 600 with a minimum grade of D- or LD 600G with a minimum grade of D-.
Equivalent(s): LD 602G, MGMT 602G
Grade Mode: Letter Grading

LD 704 - Leading Teams
Credits: 4
Leadership is the process of motivating people to achieve project goals, usually in a dotted-line organizational setting. The success or failure of the project, and by extension the manager, is dependent upon the manager's ability to assess the team as a whole, (strengths and weaknesses), and to then apply that analysis to the individual team members. Within the course, students will have the opportunity to survey and discuss multiple methodologies used to evaluate teams. Students may analyze how organizational dynamics and structure impact the manager, limit or increase their power, and their ability to perform their job.
Prerequisite(s): (LD 600 with a minimum grade of D- or LD 600G with a minimum grade of D-) and (LD 660 with a minimum grade of D- or LD 602G with a minimum grade of D- or MGMT 566 with a minimum grade of D- or MGMT 566G with a minimum grade of D-).
Equivalent(s): LD 605G
Grade Mode: Letter Grading

LD 725 - Volunteer Leadership
Credits: 4
Volunteers are increasingly important in the United States. Not only do financially strapped organizations use volunteers to enhance their capacity, but policy makers and community leaders see volunteering as a vehicle to improve communities and solve public problems. This course may cover topics of volunteer administration: such as planning, marketing, recruitment, screening and selection, training, supervision, evaluation, and recognition. Students will gain an understanding of how the demographic of today's volunteer is changing, how best to deploy the talents of multi-generational volunteers, and how to provide a structured, objective framework to be accomplished by the volunteer corps. Legal issues surrounding the use of volunteers and designing effective volunteer policies may also be addressed.
Equivalent(s): LD 625G
Grade Mode: Letter Grading

Life Sciences & Agriculture (LSA)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

LSA 400 - Freshman Academic Experience I
Credits: 1
Assistance to the undeclared student in identifying a major within the College of Life Sciences and Agriculture, including the biological, natural, and social sciences. The goal of this seminar is to support students in developing a sound academic program and assist them in making a successful transition from high school to college. The seminar also covers strategies for being a successful college student. Required for all first-semester LSA undeclared students.
Grade Mode: Credit/Fail Grading

LSA 401 - Scientific Research Exploration
Credits: 2
This course introduces incoming freshmen to the scientific research process via a hands-on approach, which includes case studies, group work, and a two-week research immersion experience under the guidance of the College of Life Sciences and Agriculture (COLSA) faculty. Course readings, discussions, and active participation in local research will facilitate the student's exploration of experimental design, hypothesis testing, data collection and analysis, interpretation of results, and effective communication of research findings. In the context of a group research project, students begin thinking like scientists, as well as strengthening their math, writing, an oral communication skills. Open to incoming freshmen only.
Grade Mode: Credit/Fail Grading

LSA 402 - Freshman Academic Experience II
Credits: 1
The second part of Freshman Academic Experience. This course reviews academic skills and focuses on your "academic career" as a student in COLSA including: major choices, opportunities for enrichment, networking, internships, and career paths. The goal of this seminar is to support students in developing a sound academic program and assist them in making a successful transition to college. The seminar also covers research strategies and building effective presentations. Required for all LSA undeclared students.
Prerequisite(s): LSA 400 with a minimum grade of D-.
Grade Mode: Credit/Fail Grading

LSA 601 - P2Bio Professional Preparation Seminar
Credits: 1
This course is required for P2Bio transfer students entering UNH in the fall semester. The course provides students with opportunities to learn about career pathways and curricular opportunities available through the P2Bio program. Students will hone skills as developing sciences scholars with an emphasis on professional development and metacognition.
Grade Mode: Credit/Fail Grading

LSA 700 - Peer Advisor Leadership Experience
Credits: 2
Training course for peer advisors who lead/support LSA 400/402. The course meets twice a week; once in LSA 400/402 and once with the Program Coordinator. This course focuses on leadership training, teaching, group dynamics, and the UNH community. Students accepted into the role of Peer Advisor will be required to sign a contract committing to an entire year of Peer Advisor Role. This course prepares students to take on a teaching/advising/mentoring role with COLSA.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

Lifetime Activity Program (LAP)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

LAP 501 - Lifetime Activity Program: Special Topics
Credits: 2
The UNH Lifetime Activity Program UNH activity courses are designed to enhance the experience of UNH students of all abilities and contribute to the overall health and well-being of the UNH student population. Participate in a fun sport that combines elements of tennis, badminton, and ping-pong. Lifetime Activity courses provide a fun, low risk, way to learn new activities and skills that will stick with you for a lifetime. The same topic may be repeated once.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading
Special Fee: Yes

LAP 502 - Lifetime Activity Program: Pickleball
Credits: 2
Participate in a fun sport that combines elements of tennis, badminton, and ping-pong. Lifetime Activity courses provide a fun, low risk, way to learn new activities and skills that will stick with you for a lifetime.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 503 - Lifetime Activity Program: Ultimate Frisbee
Credits: 2
Learn to play ultimate frisbee, a "Player defined and controlled non-contact team sport played with a flying disc on a playing surface with end zones in which all actions are governed by the "Spirit of the Game." Lifetime Activity courses provide a fun, low risk, way to learn new activities and skills that will stick with you for a lifetime.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 504 - Lifetime Activity Program: Strength Training
Credits: 2
Improve your fitness and learn how to safely strengthen the whole body. Lifetime Activity courses provide a fun, low risk, way to learn new activities and skills that will stick with you for a lifetime.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 505 - Lifetime Activity Program: Intro to Running
Credits: 2
Learn the basics of how to run for fitness and overall wellbeing. This course will cover everything from how to choose the right running shoe to preparing for a 5k running race and beyond. Class time will be spent running outdoors. Lifetime Activity courses provide a fun, low risk, way to learn new activities and skills that will stick with you for a lifetime.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 506 - Lifetime Activity Program: Fly Fishing
Credits: 2
This course is a basic introduction to fly fishing. It is a hands-on, educational fishing experience, with instruction and feedback from an experienced instructor. For the angler who really wants to learn how to fly fish on their own, this class is a tremendous value! You do not need any of your own equipment or experience. The course fee covers equipment rental and travel.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading
Special Fee: Yes

LAP 507 - Lifetime Activity Program: Yoga and Meditation
Credits: 2
This course introduces the lifelong skills of yoga and meditation. Learn how to practice different variations of yoga and meditation. You will gain skills in relaxation and mindful movement. Lifetime Activity courses provide a fun, low risk, way to learn new activities and skills that will stick with you for a lifetime.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 508 - Lifetime Activity Program: Vinyasa Flow Yoga
Credits: 2
Are you looking to move and breath in a mindful practice? This yoga class emphasizes movement between yoga poses, guided by your breath. Expect to learn the fundamental skills of vinyasa flow yoga, a practice that will serve you throughout your lifetime. No previous yoga experience necessary.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 509 - Lifetime Activity Program: Standup Paddleboarding
Credits: 2
This course will teach students stand up paddle boarding skills, emphasizing paddle techniques, core strength, and more. No experience required. If you already know the basics, you'll walk away with new skills and techniques. Take time in your busy schedule to play outside and learn how to strengthen your whole body through paddling. The special fee covers equipment rental.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading
Special Fee: Yes

LAP 510 - Lifetime Activity Program: Indoor Rock Climbing
Credits: 2
Explore new heights! This course provides students with an introduction to rock climbing in an indoor setting. Students will learn the basics of rock climbing while gaining strength and confidence. This course can also provide a foundation for students who want to eventually learn to climb outdoors. No experience required. If you already know the basics, you'll walk away with new skills and techniques.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 511 - Lifetime Activity Program: Disc Golf
Credits: 2
Disc golf is a flying disc sport in which players throw a disc at a target; it is played using rules similar to golf. Unlike golf, this game uses natural landscapes as courses. This course will help students develop the fundamental skills to play disc golf. Activity courses provide a fun, low risk, way to learn new activities and skills that will stick with you for a lifetime.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 512 - Lifetime Activity Program: Volleyball
Credits: 2
This course is designed to help students develop basic skills and knowledge in the game of volleyball. No experience required! Students will learn fundamental skills and rules of the game. Activity courses provide a fun, low risk, way to learn new activities and skills that will stick with you for a lifetime.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 514 - Lifetime Activity Program: Wilderness First Aid (WFA)
Credits: 2
WFA is the perfect course for the outdoor enthusiast or trip leader who wants a basic level of first aid training. The course is taught by UNH faculty working with SOLO Wilderness Medicine. Certifications are provided by SOLO and are valid for two years. This course is approved to recertify SOLO Wilderness First Responders.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading
Special Fee: Yes

LAP 515 - Lifetime Activity Program: Lacrosse
Credits: 2
Learn and develop basic skills of North America's indigenous sport. Play no contact games including Speed Lacrosse and Sixes. No equipment or previous experience required. Lifetime Activity courses provide a fun, low risk, way to learn new activities and skills that will stick with you for a lifetime.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 516 - Lifetime Activity Program: Cycling
Credits: 2
Learn the basics of cycling for fitness and overall wellbeing. Class time will be spent cycling outdoors. Students of all cycling abilities are welcome. Students should plan to bring their own equipment (bike and helmet), though bikes may be available for students who need them. Contact the instructor prior to registration if you need equipment.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 517 - Lifetime Activity Program: Personal Training
Credits: 2
This course provides students with foundational understanding and knowledge of human movement science, functional assessment, and program design as it applies to the field of personal training. The course follows the National Academy of Sports Medicine (NASM) personal trainer curriculum.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading

LAP 518 - Lifetime Activity Program: Ice Climbing
Credits: 2
This course introduces students to the fundamentals of ice climbing including best practices for trip planning, equipment use, technical skills, and risk management necessary to develop basic ice climbing/rappelling movement techniques and skills. Student interaction and active practical skill development are emphasized. No previous experience is required. All specialized equipment and transportation are covered by the course fee.
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading
Special Fee: Yes

LAP 520 - Lifetime Activity Program: Well-Being
Credits: 2
Well-being is a state of thriving that is influenced by both your individual choices and the communities in which you belong. In this course, you will learn the lifelong skills of caring for your wellness, harnessing your strengths, and making value-guided choices. Through this exploration you will come to understand what it means to live a life of authenticity and purpose. Opportunities to enhance existing and gain new coping skills will be provided. May be repeated barring duplication of subject.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

LAP 521 - Lifetime Activity Program: Aikido
Credits: 2
Aikido is a modern Japanese martial art that originated in the 20th century. Practitioners use dynamic throwing and pinning techniques that minimize an aggressor's power, regardless of an attacker's advantage in size or strength. While the techniques emphasize self-defense, the approach has benefits for mindfulness, conflict management, and stress reduction. Safety and mutual respect are paramount. We also believe that practice and learning should be fun!
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

LAP 522 - Lifetime Activity Program: Lifetime Activities Sampler
Credits: 2
The vision of this course is to provide students with an introduction to several lifetime activity areas. Activities include, but are not limited to yoga, health & well-being, hiking, cycling, pickleball, and meditation. The course is ideal for students interested in exploring several activities in one Lifetime Activity Program course. May be repeated barring duplication of subject.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

Linguistics (LING)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

LING 405 - Introduction to Linguistics
Credits: 4
Overview of the study of language: universal properties of human language, Chomsky's innateness hypothesis, language acquisition in children, dialects and language variation, language change. Includes an introduction to modern grammar (phonology, syntax, and semantics) and to scientific linguistic methodology.
Attributes: Social Science (Discovery); Inquiry (Discovery)
Equivalent(s): LING 405H
Grade Mode: Letter Grading

LING 603 - Phonetics
Credits: 4
This course introduces students to the study of the physical properties of speech sounds, including the transcription of English and other languages using the International Phonetics Alphabet, basic anatomy and physiology of the vocal tract, and the acoustic properties of vowels and consonants. Additional topics to be covered include phonetic variation and change, and the perception of speech sounds.
Prerequisite(s): LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-.
Equivalent(s): ENGL 603
Grade Mode: Letter Grading

LING 604 - Phonology
Credits: 4
This course introduces students to the study of phonology, or the mental organization of speech sounds. Topics covered include phonological typology, the concept of phonemes and mental representations of sounds, distinctive features and rule-based phonology, and a basic introduction to Optimality Theory.
Prerequisite(s): LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-.
Equivalent(s): ENGL 604
Grade Mode: Letter Grading

LING 605 - Intermediate Linguistic Analysis
Credits: 4
Analysis and problem solving in phonology, morphology, and syntax using data from many languages. Emphasis is both practical (learning how to describe grammar and sound system of a language) and theoretical (understanding languages' behavior).
Prerequisite(s): LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-.
Equivalent(s): ENGL 605
Grade Mode: Letter Grading

LING 606 - Languages of the World
Credits: 4
A survey of the languages of the world from genetic, areal, and typological perspectives. Students learn about the geographic and demographic distribution of language families and language isolates, as well as about structural characteristics of languages, language families and language areas. Additional topics include language endangerment and the question of linguistic universals. Students work collaboratively on a project investigating a particular language family, giving in class presentations and writing up a final project report. Some prior knowledge of phonetics, phonology, morphology, and syntax is necessary.
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D- or ENGL 605 with a minimum grade of D- or LING 605 with a minimum grade of D-.
Equivalent(s): ENGL 606
Grade Mode: Letter Grading

LING 607 - Syntax
Credits: 4
In this course, students explore the knowledge of sentence structure in an attempt to build a basic theoretical model of grammar. Students look at what we know when we know how to form phrases, sentences, and various grammatical constructions. In addition, students take an in-depth look at relationships between different elements within sentences and how best to formally account for these things. The course approaches all of this from a Chomskian/Generativist perspective in particular, although other frameworks will be discussed.
Prerequisite(s): LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-.
Equivalent(s): ENGL 607
Grade Mode: Letter Grading

LING 608 - Semantics
Credits: 4
In this course we explore meaning in language in-depth and from many different angles. First we discuss the nature of meaning and the various levels we must describe to move towards a more complete understanding. Along the way we examine meaning in words and how these meanings are stored, related and represented both in our knowledge and in the mind/brain. From there we will spend a significant amount of time uncovering the meanings of sentences by looking at sentential meaning as a function of the sum of its parts.
Prerequisite(s): LING 405 with a minimum grade of D- or ENGL 405 with a minimum grade of D-.
Equivalent(s): ENGL 608
Grade Mode: Letter Grading

LING 695 - Senior Honors
Credits: 4
Open to senior LING majors who, in the opinion of the department, have demonstrated the capacity to do superior work.
Attributes: Honors course
Grade Mode: Letter Grading

LING 718 - Morphology
Credits: 4
Morphology is the study of word formation and the mental lexicon. This course explores processes of derivation, compounding and inflection that allow us to form new words. Students will become proficient in analyzing word formation processes in English and other languages, including deploying terminology used by morphologists. Students will learn and practice the conventions of "writing like a linguist".
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D-.
Equivalent(s): ENGL 718
Grade Mode: Letter Grading

LING 719 - Sociolinguistics Survey
Credits: 4
How language varies according to the characteristics of its speakers: age, sex, ethnicity, attitude, time, and class. Quantitative analysis methods; relationships to theoretical linguistics. Focus is on English, but some other languages are examined.
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D- or ENGL 605 with a minimum grade of D- or LING 605 with a minimum grade of D-.
Equivalent(s): ENGL 719
Grade Mode: Letter Grading

LING 728 - Language and Gender
Credits: 4
This course will explore a variety of topics around the theme of language and gender, including the relationship between gender, language and power; the linguistic marking of gender; how people use language to construct and perform their gender; how gender intersects with other facets of identity, including sexuality and race and ethnicity.or.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D- or WS 401 with a minimum grade of D- or WS 405 with a minimum grade of D-.
Grade Mode: Letter Grading

LING 779 - Linguistic Field Methods
Credits: 4
Study of a non-Indo-European language by eliciting examples from an informant, rather than written descriptions of the language. Students learn how to work out the grammar of a language from raw data. (Not offered every semester).
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D- or ENGL 605 with a minimum grade of D- or LING 605 with a minimum grade of D-.
Equivalent(s): ENGL 779
Grade Mode: Letter Grading

LING 790 - Special Topics in Linguistics Theory
Credits: 4
Advanced course on a topic chosen by the instructor. Inquire at the English department office for a full course description each time the course is offered. Topics such as word formation, dialectology, linguistic theory, and language acquisition, history of linguistics, language and culture, cross-disciplinary studies relating to linguistics. Barring duplication of subject, may be repeated for credit.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): ENGL 790
Grade Mode: Letter Grading

LING 793 - Phonetics and Phonology
Credits: 4
Sound system of English and of other languages viewed from the standpoint of modern linguistic theory, including the following topics: the acoustic and articulatory properties of speech sounds, the phonemic repertoires of particular languages, phonological derivations, and prosodic phenomena such as stress and intonation.
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D- or ENGL 605 with a minimum grade of D- or LING 605 with a minimum grade of D-.
Equivalent(s): ENGL 793
Grade Mode: Letter Grading

LING 794 - Syntax
Credits: 4
Relationship of grammar and meaning viewed from the standpoint of modern linguistic theory. Emphasis on the syntax and semantics of English, with special attention to the construction of arguments for or against particular analyses.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 405 with a minimum grade of D- or LING 405 with a minimum grade of D- or ENGL 605 with a minimum grade of D- or LING 605 with a minimum grade of D-.
Equivalent(s): ENGL 794
Grade Mode: Letter Grading

LING 795 - Independent Study
Credits: 1-4
A) Synchronic Linguistics, B) Diachronic Linguistics, C) Linguistic Theory. For students showing a special aptitude for linguistics who desire to pursue a line of inquiry for which no appropriate course is offered. All requests must be forwarded by the faculty sponsor to the director of the Inter-departmental Linguistics Committee.
Grade Mode: Letter Grading

Management (MGMT) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MGMT 410 - Principles of Management
Credits: 4
This course examines a wide range of business theories and practical applications related to effective management. In addition to learning about what management is and what managers do, students also explore and assess their own management skills and styles. Students apply critical thinking skills to core business functions. Focus is on contributing factors to management styles such as communication, the role of the manager, design of the organization, ethical issues, social responsibility and globalization. Course format may include the application of these management roles and competencies through experiential activities, group exercises and case analysis.
Attributes: Writing Intensive Course
Equivalent(s): MGMT 500G
Grade Mode: Letter Grading

MGMT 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in Management. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): MGMT 544G
Grade Mode: Letter Grading

MGMT 566 - Organizational Behavior
Credits: 4
This course focuses on practical application of current research and concepts in human behavior in order to understand and analyze organizations. Interpersonal processes, problem-solving, and managerial decision-making are considered through examination of the roles of power, politics, ethics, and conflict in organizations. Topics may include individual behavior, motivation and performance, interpersonal relations, small group relations, the role of leadership, and organizational culture.
Attributes: Writing Intensive Course
Equivalent(s): MGMT 566G
Mutual Exclusion: No credit for students who have taken BUS 620.
Grade Mode: Letter Grading

MGMT 569 - Budget Management
Credits: 4
One of the primary roles of a manager is to manage budgets and to communicate with accounting and finance professionals. This course is designed to provide budgeting skills to managers, enabling them to help in the decision-making process related to the financial health of their organizations. Students will have the opportunity to become familiar with processes related to development and management of the budgeting process, accounting practices, and financial oversight.
Prerequisite(s): CMPL 402 with a minimum grade of D- or CMPL 502G with a minimum grade of D- or MGMT 502G with a minimum grade of D- or CMPL 512 with a minimum grade of D- or CMPL 612G with a minimum grade of D-.
Equivalent(s): MGMT 569G
Grade Mode: Letter Grading

MGMT 595 - Practicum in Management
Credits: 4
This project-based practicum is an entry-level field experience designed to assist Business Management majors in exploring career and vocational settings in which they can use and apply their business-related knowledge and skills. The nature of the practicum is exploratory in nature, involves extensive student initiative in designing and implementing the practicum, and is conducted under the supervision of the practicum mentor. A supplementary objective of the practicum is to explore and assess possibilities for settings and situations in which the learner may engage in an upper level Business Management Internship. Registration for this course is by permission of Academic Affairs. Earlier registration deadlines may apply.
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-.
Equivalent(s): MGMT 540G
Grade Mode: Letter Grading

MGMT 608 - Fostering Inclusion and Diversity in the Workplace
Credits: 4
Today's workforce is diverse; individuals are frequently interacting with peers, managers and customers, each with different backgrounds, experiences, group affiliations, neurodiversity, sexual orientations, religions, and identities. With equity and respect, these differences can enhance performance and creativity; workplace diversity can also help to increase employee and customer engagement, contentment, and inclusion. This course explores ways in which employees and managers can cultivate an inclusive workplace culture and offers means for expanding appreciation of each individual's uniqueness. This course may review paradigms that limit and promote inclusion, such as unconscious biases, behavioral change, leadership, acknowledgement of the dimensions of diversity, and enforcement of patterns by employers, employees, and society as a whole. Recommended: MGMT 566.
Equivalent(s): MGMT 608G
Grade Mode: Letter Grading

MGMT 625 - Legal and Ethical Issues in Business Management
Credits: 4
This course addresses the nature, functions, and operations of the legal system and how legal rules affect business operations. Students examine the legal framework of laws, rules, health and safety regulations, and judicial opinions that have direct and profound impacts on managerial decision-making and practice. Considerable emphasis is placed on the federal, state, and local regulations that directly impact business practice; consumer laws, labor and employment law; and the social and ethical environment of business policy and management practice.
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D- or PADM 500 with a minimum grade of D- or PADM 500G with a minimum grade of D- or MGMT 501G with a minimum grade of D- or MGMT 566 with a minimum grade of D- or MGMT 566G with a minimum grade of D-.
Equivalent(s): MGMT 625G
Grade Mode: Letter Grading

MGMT 626 - Project Management Strategies
Credits: 4
This course examines tools and methods used to manage projects of varying size and scope, and explores how these tools can be deployed to plan, schedule, execute, and assess projects from start to finish. Topics may include cost, risk, and quality management frameworks. While designed primarily for students in management-related and technology-related fields, the course takes a broad approach, recognizing the diversity of professions which require project management skills and knowledge. Students may be introduced to the roles and responsibilities of project and program managers in various settings, to the knowledge areas of the Project Management Institute, and to the significance of project management teams.
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D- or PADM 500 with a minimum grade of D- or PADM 500G with a minimum grade of D- or MGMT 501G with a minimum grade of D-.
Equivalent(s): MGMT 626G
Grade Mode: Letter Grading

MGMT 634 - Contemporary Management Issues
Credits: 4
In this course, students examine how such issues as globalization, technology, the environment, business ethics, and business-government relations impact how businesses are managed. They also examine how leaders manage leaner and flatter organizations comprised of diverse employees working in teams. Students may explore the broad impacts of these contemporary management issues through reading, research, case studies, and active discussions.
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D- or PADM 500 with a minimum grade of D- or PADM 500G with a minimum grade of D- or MGMT 501G with a minimum grade of D-.
Equivalent(s): MGMT 601G
Grade Mode: Letter Grading

MGMT 642 - International and Cross-Cultural Management
Credits: 4
Globalization, remote work environments, outsourcing, new technology, supply chains and current business practices require working across time zones, countries, and cultural norms, all of which challenge traditional assumptions about how to manage people and organizations. Students may study how growing worldwide interconnections impact globalization on managing organizations and people worldwide. This course reflects new and emerging individual and interrelated factors influencing international managers which may include legal, political, economic, competitive, socio/cultural, technological, and environmental factors. The class incorporates real-world examples, research, and practical application, allowing students to adjust, adapt, and navigate the changing global business landscape, assessing opportunities and addressing potential challenges.
Equivalent(s): MGMT 604G
Grade Mode: Letter Grading

MGMT 644 - Special Topics: Upper Level
Credits: 1-4
A study of current and variable topics in management. Course content changes from term to term. It is expected that the learner will have prior coursework or experience in the subject matter.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): MGMT 644G
Grade Mode: Letter Grading

MGMT 680 - Global Business
Credits: 4
This course introduces the concept of global business as a system and the theories which underlie it; institutions that are visual evidences of it; production, marketing, financial, legal, human resource management, culture, politics and other subsystems which comprise the total system. It also examines national governmental and international institutional controls and constraints, which impact the environment in which the system operates. Students may examine growing worldwide interconnections to gauge the impact of globalization on managing organizations and people worldwide. Global business has an impact on all businesses, regardless of size or location of your business.
Attributes: Writing Intensive Course
Equivalent(s): MGMT 633G
Grade Mode: Letter Grading

MGMT 685 - Global Innovation
Credits: 4
This course recognizes the deep connection between global trade, technology, and innovation. Combining studies in global business and its responsible management with the specialized knowledge of technology and global innovation management gives students the opportunity to prepare for successful careers in a global environment for firms that compete on the basis of innovation in products and services. Students may learn how the product life-cycle influences the commercialization of new technology products in a diverse and ever-changing global market.
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-.
Equivalent(s): MGMT 632G
Grade Mode: Letter Grading

MGMT 695 - Internship in Management
Credits: 4
The upper level Business Management Internship is a field-based experience designed to develop and hone the practical application skills of a Business Management major. Students apply for an internship at a self-selected site and negotiate the terms of the internship experience with a site supervisor under the general auspices of their faculty internship mentor. The internship requires documented evidence of eighty hours of supervised experience and practice in a field setting where business management-related knowledge and skills are applied. NOTE: It is recommended that learners have completed the majority of upper level course work in their major prior to enrolling in this course. Registration for this course is by permission of Academic Affairs. Earlier registration deadlines may apply.
Equivalent(s): MGMT 640G
Grade Mode: Letter Grading

MGMT 706 - Fundraising and Resource Development
Credits: 4
Fundraising is the act of soliciting for contributions or pledges. Development, on the other hand, refers to nurturing and building relationships over time between donors/philanthropists and organizations. The purpose of this course is to differentiate fundraising, grant writing, and development strategies in organizations. Students will examine the roles and responsibilities of the individuals within an organization that motivate, nurture, engage, and maintain donor relationships. This course may review ethics and transparency within fundraising, technology to facilitate resource development, social and business trends, and organizational adaptation.
Attributes: Writing Intensive Course
Equivalent(s): MGMT 605G
Grade Mode: Letter Grading

MGMT 707 - Nonprofit Management
Credits: 4
This course guides participants in understanding nonprofit organizations and their management. Topics may include motivations for starting nonprofit organizations as well as theories and strategies to balance the unique needs of nonprofits within market economies. This course covers considerations for staffing and volunteer management, funding sources, asset management, program evaluation and leadership structures as elements of identifying qualities of successful nonprofit organizations at various stages of development. Projects may include interviewing, building a nonprofit business plan, and presentations.
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D- or MGMT 566 with a minimum grade of D- or MGMT 566G with a minimum grade of D-.
Equivalent(s): MGMT 638G
Grade Mode: Letter Grading

MGMT 715 - Financial Management for Nonprofit Organizations
Credits: 4
Nonprofit management is becoming a recognized specialty, with a growing number of individuals and entities specializing in nonprofit financial management. Concepts cover financial management considerations related to ethics, governance, policy and mission frameworks that are unique to nonprofit organizations and practices.
Prerequisite(s): (ACCT 532 with a minimum grade of D- or ACCT 511G with a minimum grade of D- or MGMT 511G with a minimum grade of D-) and (MGMT 707 with a minimum grade of D- or MGMT 638G with a minimum grade of D-).
Equivalent(s): MGMT 639G
Grade Mode: Letter Grading

MGMT 795 - Integrative Capstone: Industry-Based Internship
Credits: 4
This capstone course is a field-based internship designed to develop and hone the practical application skills of a Business Management major. The course requires students to integrate the knowledge and skills gained from other courses in the program and to demonstrate the ability to apply their knowledge to new subject matter and practical situations. Students apply for an internship at a self-selected site and negotiate the terms of the internship experience with a site supervisor under the auspices of their faculty mentor. The internship requires documented evidence of eighty hours of supervised experience and practice in a field setting where management-related knowledge and skills are applied. Students will also be required to submit professional documents such as a cover letter, resume, and professional portfolio as part of the course. NOTE: Registration for this course, an internship, is by permission of Academic Affairs. Early registration deadlines may apply. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): MGMT 651G
Grade Mode: Letter Grading

MGMT 796 - Individualized Studies Capstone
Credits: 2-9
This course is an independent learning experience used to satisfy the integrative requirement. The purpose of the integrative experience is to provide the learner with a capstone project in which to reflect on and synthesize his or her prior learning and apply it at a new, higher level of understanding. It is the final learning experience of your degree program and is undertaken after all other coursework is completed. This capstone may incorporate some new aspects of learning, but the project must integrate foundation and specialized coursework into the experience. No transfer, assessment or validation credit may be used to fulfill this requirement. Course content is approved by Academic Affairs.
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): MGMT 670AG
Grade Mode: Letter Grading

MGMT 797 - Integrative Capstone: Industry-Based Project
Credits: 4
This capstone course builds on all previous coursework. By completing a course project, students synthesize practical knowledge and academic theories to develop and implement effective managerial strategies in their own field of professional interest. Students will have the opportunity to explore current research in the field of management to meet their personal professional goals and goals of their organizations. Professional documents such as a cover letter, resume, and professional portfolio are developed by students in this course. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): MGMT 660G
Grade Mode: Letter Grading

MGMT 798 - Integrative Capstone: Strategic Management Experience
Credits: 4
This capstone course focuses on the concepts and techniques of business management. It analyzes the process of developing and executing strategies designed to maximize a company's competitive advantage. With this information, students will develop skills to determine the appropriate strategy to fit the company's unique resources and environment. Students will have the opportunity to participate in experiential learning that will allow them to apply previous learning and degree content by crafting and executing strategy. They will also apply their knowledge of strategic management to their own field of professional interest by completing a course project. Students will also be required to submit professional documents such as a cover letter, resume, and professional portfolio as part of the course. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): MGMT 650G
Grade Mode: Letter Grading

Management (MGT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MGT 520 - Topics in Management
Credits: 4
Special topics, vary by semester.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MGT 535 - Organizational Behavior
Credits: 4
Application of behavioral science concepts to work settings in profit and nonprofit organizations. Individual settings behavior, interpersonal relations, work groups, relations among groups studied in the context of organizational goals and structure. Experiential focus. For non-business administration majors and minors.
Equivalent(s): MGT 580
Mutual Exclusion: No credit for students who have taken ADMN 575.
Grade Mode: Letter Grading

MGT 540 - Leading with Impact: Strategies for Modern Leadership
Credits: 4
This course provides students with the opportunity to explore leadership through multiple modes of inquiry and learning experiences. The emphasis is on students' development of their philosophies of leadership through self-reflection, peer-to-peer dialogue, and experiential learning opportunities. By inventorying their strengths, values, and behavior, students will gain comprehension of and appreciation for collaborating effectively while also engaging in respectful discourse. By doing so, students in this class will define what leading means for them, and how they can leverage their abilities to plan and execute positive, strategic change.
Equivalent(s): MGT 585
Grade Mode: Letter Grading

MGT 620 - Topics in Management
Credits: 4
Special topics, vary by semester.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MGT 630 - Leading in Diverse Organizations
Credits: 4
This course is designed to help students navigate diverse organizational settings more effectively and improve their ability to work within and lead diverse teams and organizations. It also offers students the opportunity to develop their critical thinking on topics such as identity, relationships across difference, discrimination and bias, equality, and equity in organizations and society and how they relate to organizational issues of power, privilege, opportunity, inclusion, creativity and innovation and organizational effectiveness.
Prerequisite(s): PHIL 431 with a minimum grade of C- and ADMN 575 with a minimum grade of C-.
Grade Mode: Letter Grading

MGT 636 - Introduction to Entrepreneurship
Credits: 4
Welcome to the entrepreneurial revolution! Introduction to Entrepreneurship is an introductory course intended to provide students with a solid foundation in terms of the vital role played by entrepreneurs and entrepreneurship in the global economy. We will assess, explore, critique, and celebrate the phenomenon of entrepreneurship. Entrepreneurship is approached as a way of thinking and acting, as an attitude and a behavior. Our emphasis is on entrepreneurship as a manageable process that can be applied in virtually any organizational setting. Our principal focus will be on the creation of new ventures, the ways that they come into being, and factors associated with their success. This course is planned as a general overview of the beginning phase of starting a business and offers a brief view to the key concepts in Entrepreneurship. You will be encouraged to develop and defend your own set of conclusions regarding each of these issues. It is a course that mixes theory with practice, and you will be challenged to apply principles, concepts, and frameworks to real-world situations. The course will include a practical, hands-on, engagement project.
Grade Mode: Letter Grading

MGT 640 - Human Resource Management
Credits: 4
This course introduces the fundamentals of Human Resource Management (HRM) and how HR is using data to drive decision making (People Analytics). HRM should be an essential part of any business strategy to be integrated into the traditional trio of finance, marketing and operations. In most organizations, Human resource related costs are by far the number one line of operating expenses. But to earn and maintain a seat at the table, and help make data-informed strategic decisions, HR partners will need to bring a solid knowledge about gathering the right data, choosing appropriate analysis, and interpreting and communicating findings in a meaningful way.
Prerequisite(s): ADMN 575 with a minimum grade of C- or MGT 580 with a minimum grade of C- or MGT 535 with a minimum grade of C-.
Grade Mode: Letter Grading

MGT 642 - Talent Acquisition
Credits: 4
This course is designed to provide an understanding of organizational staffing and hiring with an emphasis on issues that impact staffing in modern organizations. It will cover multiple aspects of the staffing process, including recruitment, assessment, and selection methods and procedures. In addition, the utility of methods used in job analysis, performance measurement, and internal and external market analysis will be discussed. This course is project intensive; students will be responsible for creating job descriptions, developing recruitment strategies, and building basic selection systems.
Prerequisite(s): ADMN 575 with a minimum grade of C- or MGT 580 with a minimum grade of C- or MGT 535 with a minimum grade of C- or HMGT 635 with a minimum grade of C-.
Grade Mode: Letter Grading

MGT 655 - Doing Business Globally
Credits: 4
This course introduce students both the macro- and micro-level aspects of international business. Topics include the formal and informal institutions of global business, international trade and economic regional integration, foreign exchange and international monetary system, international strategies for entering foreign markets and managing global growth.
Prerequisite(s): ADMN 575 with a minimum grade of C- or MGT 535 with a minimum grade of C-.
Grade Mode: Letter Grading

MGT 662 - Exploration in Entrepreneurial Management
Credits: 4
Examines the management of change and innovation, especially the role of entrepreneur in managing new ventures. Uses case analysis, guest speakers, and business plan preparation to study the characteristic behavioral, organizational, financial, and marketing problems of entrepreneurs and new enterprises.
Attributes: Writing Intensive Course
Prerequisite(s): (ADMN 575 with a minimum grade of C- or MGT 580 with a minimum grade of C- or MGT 535 with a minimum grade of C-) and (ADMN 585 with a minimum grade of C- or MKTG 550 with a minimum grade of C- or MKTG 530 with a minimum grade of C-) and (ADMN 502 with a minimum grade of C- or ACFI 501 with a minimum grade of C- or ACCT 501 with a minimum grade of C-).
Equivalent(s): MGT 732, MGT 733
Grade Mode: Letter Grading

MGT 666 - Strategic Negotiation and Conflict Management
Credits: 4
Negotiation is the art and science of securing agreements between two or more interdependent parties seeking to maximize their outcomes. Negotiating and decision-making are essential managerial skills, necessary for influencing employees and stakeholders. This course will draw on the latest research, to help you learn how to negotiate successfully and with integrity. Topics covered include bargaining with one or more parties, influence strategies, ethical and social dilemmas, and negotiating with difficult people.
Prerequisite(s): ADMN 575 with a minimum grade of C- or MGT 580 with a minimum grade of C- or MGT 535 with a minimum grade of C-.
Grade Mode: Letter Grading

MGT 701 - Stakeholder Engagement & Sustainable Businesses
Credits: 4
Demands on strategy have expanded in a new era of capitalism. Businesses must assume responsibility for addressing complex issues at the intersection of business and society. This course prepares students to drive change by leading purpose-driven businesses that engage all stakeholders, not just shareholders and management. Conscious capitalism and realizing that everything connects to everything else - ethics, economics, politics, culture, technology, environment - is the foundation for growing businesses while simultaneously solving global societal challenges.
Prerequisite(s): ADMN 575 with a minimum grade of C-.
Equivalent(s): ADMN 701
Grade Mode: Letter Grading

MGT 713 - Leadership Assessment and Development
Credits: 4
Activities and exercises to help students determine their ideal job upon graduation as well as their career goals for the next three to five years. Students learn a matrix of key leadership behaviors and skills that distinguish high-performing managers and executives. Each student's behavior is assessed using this model so that students can determine the leadership behaviors and skills they most need to develop to meet their early career goals. Faculty assist students in developing a personal leadership development plan to focus professional energy, efforts, and achievements over the next three to five years.
Prerequisite(s): ADMN 575 with a minimum grade of C-.
Grade Mode: Letter Grading

MGT 714 - Organizational Changemaker Skills
Credits: 4
This course will leverage research from strategy, economics, organizational behavior, psychology, and sociology to understand organizations' dynamic and ever-changing nature. This multi-disciplinary view will cut across organizational levels to examine frame-breaking change at the macro level, like major strategy shifts to the more micro implications of team change like member churn. Students will learn how to diagnose organizational problems, communicate issues, options, and recommendations, and lead change efforts at the team and organizational level.
Prerequisite(s): ADMN 575 with a minimum grade of C-.
Equivalent(s): MGT 614
Grade Mode: Letter Grading

MGT 720 - Topics in Management II
Credits: 4
Special topics, vary by semester.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MGT 720W - Topics in Management II
Credits: 4
Special topics, vary by semester.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MGT 733 - Launch Ready: The Entrepreneur's Capstone
Credits: 4
This capstone course offers an immersive, incubator-style experience where students will apply the entrepreneurial concepts, financial knowledge, and management skills gained throughout the program to bring a business idea to a complete plan. Working in a structured, collaborative environment, students will receive mentorship from entrepreneurs and investors, participate in business development workshops, and gain access to resources such as co-working spaces (the e-center), legal and financial advisors, and potential investors. The course culminates in a final pitch to investors or a panel of industry experts (Holloway Competition).
Attributes: Writing Intensive Course
Prerequisite(s): DS 741 with a minimum grade of C- and (MGT 742 with a minimum grade of C- or DS 742 with a minimum grade of C-).
Equivalent(s): MGT 662, MGT 732
Grade Mode: Letter Grading

MGT 740 - Strategic HR & Analytics
Credits: 4
This course introduces the fundamentals of Human Resource Management (HRM) and analytical techniques most commonly used to make strategic HR decisions. While HR costs often are a company's number one operating expense, effective HR management is more than keeping costs down. HR professionals help shape a company's workforce and ensure that it has the skills and knowledge needed to successfully implement its strategy. Students will learn the analytical tools to make these decisions.
Prerequisite(s): ADMN 510 with a minimum grade of C- and ADMN 575 with a minimum grade of C-.
Grade Mode: Letter Grading

MGT 755 - Managing Business and People Across Borders
Credits: 4
This course examines how firms and managers operate in an increasingly interconnected global environment. It provides a comprehensive overview of the strategic, organizational, and interpersonal challenges involved in managing business activities and leading people across national, cultural, and institutional boundaries. Key topics include the global business environment, entry strategies, cross-cultural management, international negotiation, global organizational structure and design, global leadership, human resource management across countries, and ethics and corporate social responsibility in multinational contexts.
Attributes: Writing Intensive Course
Prerequisite(s): ADMN 575 with a minimum grade of C-.
Grade Mode: Letter Grading

Marine Sciences (MARI)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MARI 533 - Basic SCUBA
Credits: 3
A full semester rigorous introduction to the fundamentals of SCUBA diving, including diving physics, physiology, decompression issues, environment, equipment, and safety. Through a progressive series of classroom lectures and pool sessions, students gain the knowledge and skills necessary to conduct themselves with competence in New England waters. Emphasis on safety and problem prevention. Strong swimming ability required.
Equivalent(s): KIN 533
Grade Mode: Letter Grading
Special Fee: Yes

MARI 705 - Introduction to Marine Policy: Understanding US Ocean, Coastal and Great Lakes Policy
Credits: 3
Effective management of human activities in ocean, coastal and Great Lakes areas is critical to our future. This course provides a foundation for students from various backgrounds to understand US marine policy and how it relates to their future careers in research, policy, law, or management. While focused on US marine policy, the course also provides international context, including the UN Law of the Sea and other related conventions on pollution, fisheries, and resource protection.
Equivalent(s): INCO 705
Grade Mode: Letter Grading

MARI 730 - Research Diving Technologies
Credits: 4
Certified divers receive extensive training in the methods, specific techniques, and challenges required to conduct underwater research in the Gulf of Maine. Progressively builds upon basic diving skills and knowledge until the student is competent to formulate and implement an independent pilot research project. The results will be written up and presented to the class. Completion of 100-hour course may lead to UNH/AAUS Scientific Diver certification. SCUBA open water certification and a college level science course required prior to taking this course.
Equivalent(s): KIN 730, MEFB 730
Grade Mode: Letter Grading
Special Fee: Yes

MARI 735 - Advanced SCUBA
Credits: 4
Through this course students will become competent and highly educated in a variety of diving disciplines to prepare them to work underwater. Students will be exposed to a variety of diving-related topics through a series of lecture and hands-on practical applications. Topics covered are navigation, search and recovery, low visibility, night diving, surface supplied diving, boat driving, accident management, hyperbaric medicine, physics, physiology, working and scientific research methods for diving. Open water certification and college level science course required prior to taking course.
Equivalent(s): KIN 735
Grade Mode: Letter Grading
Special Fee: Yes

MARI 795 - Special Topics
Credits: 1-4
New or specialized topics not normally covered in regular course offerings.
Repeat Rule: May be repeated for a maximum of 5 credits.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

MARI 795W - Crafting Ocean Stories: Research & Writing for the Public in Marine Science & Ocean Engineering
Credits: 3
Clear, unbiased, and engaging communication of new developments in science and engineering can help foster a populace that is well-informed, thinks critically, and remains democratically engaged. In this course, students will learn to curate well-researched stories on topics in marine science and ocean engineering for a general audience. Topics covered include interviewing experts, making sense of scientific analysis, visualization of facts and data, and crafting compelling stories. The final course output will be a feature-length article reporting on UNH marine research or addressing a community-sourced question related to the marine environment. A 101-level course in college science is recommended prior to taking this course.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

Marine, Estuarine and Freshwater Biology (MEFB)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MEFB 401 - Marine Estuarine and Freshwater Biology: Freshmen Seminar
Credits: 1
The purpose of this course is threefold: First to acquaint freshmen MEFB majors to the wide range of topics that are included in the broad area of marine, estuarine and freshwater biology. Second, to introduce new UNH students to many of the MEFB faculty at UNH and give them the opportunity to become aware of the types of research that is being conducted at UNH. Finally, to begin teaching freshmen how to read the primary literature, write concise summaries of papers they read, give oral presentations to their peers, and understand how scientific knowledge is acquired and disseminated. Students attend a series of seminars presented by a wide range of MEFB faculty. The topics presented vary from year to year depending on the faculty that agree to participate. In addition students are required to read the current literature, write short papers and give presentations to the class.
Grade Mode: Credit/Fail Grading

MEFB 403 - Investigative Marine Biology Laboratory
Credits: 2-4
This course in an intensive marine-based introduction to the scientific method and experimental biology taught a Shoals Marine Laboratory. The course takes advantage of the unique learning opportunities afforded by the pristine marine environment (especially the intertidal) around Appledore Island. The overall course philosophy is to allow students to learn the scientific method by doing it themselves under the guidance of veteran marine biologists. The course is structured around two class projects that are designed to expose students to concepts and techniques in marine ecophysiology and biomechanics. (Summers only at Shoals Marine Lab.)
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 410 - Marine Immersion
Credits: 2
An intensive 2-credit course for incoming freshmen, surveying a range of marine-related fields (with an emphasis on biology and ecology), research approaches, and organisms. The course is based at the Shoals Marine Laboratory on Appledore Island, where students, and some faculty, will be in residence. "Marine Immersion" introduces students to the breadth, excitement, and challenges of marine sciences through lectures, demonstrations, and field experiences offered by a cohort of UNH faculty, and through short research projects carried out on the island. It also introduces them to resources and opportunities available at UNH, provides an opportunity to get to know some of their professors, and lets them begin building a network among their peers even before they arrive in Durham. (Summers only at Shoals Marine Lab.)
Equivalent(s): ZOOL 410
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 460 - Biological Illustration
Credits: 4
In this course, students build a foundation of skills needed for biological illustration using the many visual opportunities that Appledore Island offers for natural science subjects. Lectures and demos introduce each of five projects using a variety of media including graphite and graphite dust, pen & ink, watercolor, and colored pencil. Basic standards needed in the creation of professional work are covered, include observational drawing, attention to detail and accuracy, composition, color, tonal values, and perspective. The class will visit many locations on the island for inspiration and visual reference. Students will create a final project demonstrating skills they have developed with one of the media covered in the course. (Summers only at Shoals Marine Lab.)
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 503 - Introduction to Marine Biology
Credits: 3
Emphasizes the organization of marine biological communities. Various marine environments pelagic, benthic, temperate, tropical, and their characteristic communities. Major emphasis on the approaches (e.g., analysis of energy flow and predator-prey interactions) used to analyze marine communities as well as the sampling techniques employed for each approach and the characteristic habitat type.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading

MEFB 505 - Introduction to Applied Science Communication
Credits: 4
In this course students develop the capacity to solve increasingly challenging problems with greater independence. Students fill their science communication "tool box," learning how to engage a nonscientist audience. They will be introduced to video production, podcasts, Wikipedia editing, public science events, social media platforms, blogging and press release writing. After gaining basic skills with these communication platforms and tools, students will apply their skills to a topic of their own research interest on the island. Students will actively participate in a local public science event (Rock talks) and learn how to start a science cafe on their own. Students will receive feedback from their peers and their instructors, and by the end of this course they will become more effective science communicators. Skills gained in this course in this unique environment can be applied to any research field and are essential for every scientist. (Summers only at Shoals Marine Lab.)
Prerequisite(s): BIOL 411 with a minimum grade of D- and BIOL 412 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 506 - Marine Parasitology and Disease
Credits: 4
This course will focus on one of the most diverse and fascinating groups of marine organisms: parasites. The course will explore marine parasites and pathogens at multiple levels, including: (1) the evolutionary perspective with an emphasis on coevolutionary relationships; (2) parasitic diseases and life cycles (from simple to complex); (3) taxonomic and phylogenetic understanding of parasite and host groups (with a focus on metazoan parasites and hosts); (4) ecological implications of parasitism in marine systems at the population, community, and ecosystem levels; and (5) the effects of human induced global change on parasitism in marine communities. (Summers only at Shoals Marine Lab.)
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 508 - Marine Ecosystem Research and Management
Credits: 4
This course challenges students with real-world problems in the Gulf of Maine related to ecosystem research and management. Students learn the tools to conduct field and laboratory research and how to apply these tools in a real-world conservation management problem. Students work in small groups to design and implement and short research project. Results are presented to local and regional conservation practitioners in the Gulf of Maine. One semester of college biology should be taken prior to this course.
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 510 - Field Ornithology
Credits: 4
Introduces field ornithology focusing on the biology, ecology, and behavior of avifauna on the Isles of Shoals. Includes such ornithological field methods as censuring techniques, territory mapping, banding, behavioral observation, and creating a field notebook. Fieldwork is designed to supplement many classroom concepts, including territoriality, breeding biology, and survivorship. One year of college level biology required. Lab. (Summers only at Shoals Marine Lab.)
Equivalent(s): ZOOL 510
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 530 - Evolution and Marine Diversity
Credits: 5
Patterns of diversity and processes of evolution. Topics include the diversity of life, the fossil record, macro-evolutionary patterns, the genetics and developmental basis of evolutionary change, processes at the population level, evolution by natural selection, modes of speciation, long-term trends in evolution, and human evolution. (Summers only at Shoals Marine Lab.)
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 535 - Marine Mammal Biology
Credits: 4
This course explores the biology and conservation of the whales and seals, with a particular focus on species of the Gulf of Maine. Lectures examine many facets of marine mammal science including: taxonomy and species diversity, morphological and physiological adaptations for life in the sea, foraging ecology and behavior, reproductive cycles, bio-acoustics, anthropogenic interactions, and management of threatened species. Land and open water observations of whale and seal behavior give students hands on opportunities to study marine mammals in the field. (Summers only at Shoals Marine Lab.)
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 545 - Field Bioacoustics and Soundscape Ecology
Credits: 4
In this course students will gain hands-on introductory experience in bioacoustics and soundscape ecology research, including biological concepts behind animals' sound production and hearing, skills for deploying acoustic sensors in terrestrial and underwater habitats, and acoustic data analysis methods. The course will consist of several lectures covering fundamental concepts in acoustics, soundscapes, and digital sound signal processing. The majority of class time will be spent deploying and recovering acoustic sensors and conducting experiments in the field, as well as in computer-lab sessions to analyze and summarize collected data. We will primarily focus on "Passive Acoustic Monitoring (PAM)" which involves non-invasive recording of sounds present in an environment (i.e., soundscapes) with microphones (when deployed on land) or hydrophones (when deployed underwater). Gulls and other seabird residents of the Isles of Shoals will be the main focal animals for terrestrial field work, and opportunistic recordings may be made of other vocalizing animal inhabitants including mammals, fishes, and invertebrates. Students will further learn how to study the contributions of anthropogenic sounds (i.e., from human-made sources) to natural soundscapes. Students will also conduct field-based acoustic playback experiments to study how different properties of gull vocalizations influence gull behavior.
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 590 - Coastlines in Crisis
Credits: 4
Pairing students from coastal geographies through synchronous online and in-person lecture, we'll explore trends threatening resilience of our coasts and their inhabitants. The science and public perception of coastal threats, sea level rise, and climate related issues will build a baseline for understanding the issues coastal communities face, including contributing factors, and the role of science, technology, and environmental policy in the delicate balancing act between nature and infrastructure.
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 625 - Introduction to Marine Botany
Credits: 5
Life history, classification, and ecology of micro- and macroscopic marine plants, including phytoplankton, seaweed, and salt marsh plants, and the interactions between humans and marine plant communities. Occasional Saturday morning field trips. Lab.
Prerequisite(s): BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D- or BIOL 409 with a minimum grade of D-.
Equivalent(s): PBIO 625
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 628 - Marine Invertebrate Evolution and Ecology
Credits: 4
Stresses the rich diversity of marine invertebrates by integrating phylogenetic trends with physiological and behavioral adaptation, and with ecological and symbiotic interactions. Offers a comparative survey of invertebrates from protozoans to protochordates; deals with aspects of form and function, development, evolution, classification, ecology, and natural history. Students work with live and preserved animals. Extensive dissections and a field component are required.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 633 - Quantitative Reasoning and Analysis for Marine Sciences
Credits: 4
Expand your statistical knowledge and resume by learning R. Use project-based learning to explore marine mammal populations, intertidal systems, and fisheries while learning statistical skills and R. In this course students will learn to become proficient in R (data manipulation, graphing, hypothesis testing, importing and cleaning data) and learn to effectively communicate statistical results. (Summers only at Shoals Marine Lab.)
Mutual Exclusion: No credit for students who have taken BIOL 633.
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 674 - Ecology and Marine Environment
Credits: 4
Introduces the marine sciences with an emphasis on field work in natural habitats. Examines aspects of the systematics, morphology, physiology, behavior, and ecology of marine organisms, including intertidal plants and invertebrates, fishes, marine mammals and birds; fisheries biology; oceanography, marine geology; and human impacts on the marine environment. Sessions include lectures, discussions, field work, experience aboard a coastal research vessel, and excursions to distinctive habitats. Offered in cooperation with Cornell University. Students may not take Field Marine Science after taking Field Marine Biology and Ecology. One year of college level biology required. (Summers only at Shoals Marine Lab.)
Equivalent(s): ZOOL 674, ZOOL 675
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 675 - Marine Mammal Biology and Conservation
Credits: 3
This course is designed to be a detailed investigation into the biology of cetaceans, pinnipeds, and other marine mammals. In this course we will learn about the evolution of marine mammals, general adaptations to a marine existence, morphology, systematics and biogeography, reproduction, diving physiology, communication and echolocation, feeding and migratory behavior, and marine mammal/human interactions. The course will include a survey of major conservation concerns and potential management solutions, as well as a unit on cultural competencies and the historic relationship between humans and marine mammals.
Prerequisite(s): BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-.
Equivalent(s): MEFB 535
Grade Mode: Letter Grading

MEFB 702 - Sustainable Marine Fisheries
Credits: 4
An intensive course for undergraduate students that introduces students to the complex challenges facing today's fishing industry, which is being asked to simultaneously sustain the livelihood of fishermen while meeting long-term conservation goals. The course is held both at the UNH Campus and at the Shoals Marine Laboratory. New England fisheries are used as a case-study for this course through global fishing management, trends, and issues are also discussed. (Summers only at Shoals Marine Lab.)
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 714 - Field Animal Behavior
Credits: 4
An animal's behavioral patterns represent its abilities to deal with the environment dynamically. Course focuses on ecological and evolutionary significance of behavioral patterns found in all organisms, particularly those animals that inhabit coastal marine environments. Strong emphasis on methods of behavioral research and interpretation of behavioral patterns using field observations of diverse fauna of Appledore Island and surrounding waters. One year of college level biology required. (Summers only at Shoals Marine Lab.)
Equivalent(s): ZOOL 714
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 717 - Lake Ecology
Credits: 4
Introduces the ecology of freshwater systems with emphasis on lakes. Origins of lakes and the effects of watersheds on lake chemistry and nutrient cycling are explored. Other topics include the impact of human disturbances on productivity and aquatic food webs and methods used for the management and restoration of lakes. Comparisons are made of the structure and functions of lake ecosystems found in temperate, tropical and arctic regions. General biology required prior to taking this course.
Equivalent(s): BOT 717, PBIO 717, ZOOL 717
Grade Mode: Letter Grading

MEFB 719W - Field Studies in Lake Ecology
Credits: 4
Ecology of lakes and other freshwater habitats examined through field studies. Emphasizes modern methods for studying lakes; analysis and interpretation of data; and writing of scientific papers. Seminars on research papers and student presentations of class studies. Field trips to a variety of lakes, from the coastal plain to White Mountains; investigate problems, such as eutrophication, acidification, biodiversity and biotoxins. Capstone experiences include interaction with state agencies, lake stakeholders and the submission of written manuscripts for publication. Introductory Biology required prior to taking this one.
Attributes: Writing Intensive Course
Equivalent(s): MEFB 719, PBIO 719, ZOOL 719
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 720 - Marine Invasive Species: Ecology, Evolution and Management
Credits: 4
This course explores the spread, establishment, and impact of invasive species. Students will become familiar with ecological and evolutionary theories pertaining to species invasions, and methods for assessing their spread and impact at local and global scales. The course examines: (1) ecological impacts and predictors of invasive species; (2) evolutionary insights of invasions; (3) taxonomic identification and survey techniques; (4) management implications of invasive species; and (5) the effects of global change on their spread. One semester of college biology or equivalent should be taken prior to this course. Summers only at Shoals Marine Lab.
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 725 - Marine Ecology
Credits: 3
This course is an exploration of marine ecology principles. Students will engage in field-based research projects to investigate ecological processes in marine environments. Emphasis will be placed on the structure and function of temperate rocky intertidal systems, the drivers of ecological change, statistical analysis of ecological data, and the influence of human activities on marine benthic systems. Key topics include recruitment ecology, physiological stress, competition, disturbance, trophic ecology, facilitation, and positive interactions.
Prerequisite(s): (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D-) and MEFB 503 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 730 - Underwater Research
Credits: 4
Hypothesis testing and experimental design, theoretical and practical aspects of sampling, and critiques of current research papers. Includes special problems of conducting research underwater (diving physics and physiology, theory and use of diving tables, hyperbaric medicine) and underwater techniques (underwater photography and video, photo quadrates, tagging and marking, cages and enclosures). Students must supply their own equipment. Required prior to taking this course: recognized scuba certification, a medical examination, one year of biology or other supporting science. See additional specific details about requirements here: https://www.shoalsmarinelaboratory.org/underwater-research. (Summers only at Shoals Marine Lab.)
Equivalent(s): KIN 730, MARI 730
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 741 - Sharks: Biology and Conservation
Credits: 4
The last 30 years have produced an explosion of new information on the biology of the approximately 1,000 living species of sharks, skates, rays, and chimaeras, which collectively make up the group Chondrichthyes. This course will cover advanced topics in the evolution, diversity, anatomy, functional morphology, physiology, sensory systems, behavior, reproduction, development, and conservation of cartilaginous fishes. (Summers only at Shoals Marine Lab.)
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 747 - Aquatic Plants in Restoration/Management
Credits: 4
A field-intensive class focusing upon freshwater and marine vascular plants with an emphasis on species commonly associated with ecological restoration, the identification and conservation of rare species, and the adaptations and management of invasive species of aquatic habitats in New England. Field trips emphasize the flora of various wetland habitats, including open water and vegetated fresh water wetlands, as well as coastal and estuarine habitats. Lectures and readings examine the current trends in research and management focusing upon specific taxa and pertinent facets of their taxonomy, physiology, and natural history.
Equivalent(s): PBIO 747
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 751 - Research in Biology at the Shoals Marine Lab
Credits: 4
Introduces the adaptations of organisms to marine environments and the role these adaptations have in structuring marine communities using an experimental approach. Emphasizes experimental design, implementation, data analysis, and scientific presentations. Prereq: one year of college-level biology or permission. Additional experience in biology, ecology or physiology is recommended. (Summers only at Shoals Marine Lab.)
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 754 - Anatomy and Function of Marine Vertebrates
Credits: 4
The course is designed to introduce students to a comparative study of the principal organ systems of vertebrates (i.e., fishes, sea turtles, marine birds, marine mammals) that are specifically adapted to the marine environment. Rather than focusing only on description of anatomical structure, the anatomy of structures are investigated with function, biological role, and evolutionary relationships. Laboratory exercises cover osteology, dissection, behavior and biomechanics. One year of college biology required prior to taking this course. (Summers only at Shoals Marine Lab.)
Equivalent(s): ZOOL 753, ZOOL 754
Grade Mode: Letter Grading
Special Fee: Yes

MEFB 755 - Biological Oceanography
Credits: 3
Biological processes of the oceans, including primary and secondary production, trophodynamics, plankton diversity, zooplankton ecology, ecosystems and global ocean dynamics.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Equivalent(s): ESCI 750, ZOOL 750
Grade Mode: Letter Grading

MEFB 772 - Fisheries Biology: Conservation and Management
Credits: 4
Globally, many fished populations are declining, but 3.2 billion people eat fish and the average human eats greater than 40 pounds of fish a year. This course identifies what biological characteristics are important to management and how they are measured. The course also explores quantitative methods describing fishery-population interactions and other management tools. Lastly, students will learn about the impacts of fishing on ecosystems.
Prerequisite(s): BIOL 411 with a minimum grade of D- and BIOL 412 with a minimum grade of D-.
Equivalent(s): ZOOL 772
Grade Mode: Letter Grading

MEFB 773 - Physiology of Fishes
Credits: 4
Investigates the physiological processes responsible for maintaining homeostasis in fishes. Focuses on the function and regulation of the major organ systems during stress and environmental adaptation. Topics include reproduction, osmoregulation, digestion, endocrinology, and sensory perception.
Grade Mode: Letter Grading

MEFB 795 - Independent Investigations in Marine, Estuarine, and Freshwater Biology
Credits: 1-4
Independent study in a topic related to Marine, Estuarine, or Freshwater Biology, arranged by the student with a faculty sponsor. Enrollment by permission only.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 5 times.
Grade Mode: Letter Grading

MEFB 796 - Shoals Undergraduate Research
Credits: 1
This course is for students who are participating in the Shoals Undergraduate Research Group and conducting independent research at the Isles of Shoals arranged by the student with a faculty sponsor. This course emphasizes hypothesis design, experimental design, implementation, data analysis, and scientific presentations. One year of college-level biology required prior to taking this course. (Summers only at Shoals Marine Lab.)
Repeat Rule: May be repeated for a maximum of 3 credits. May be repeated up to 3 times.
Grade Mode: Letter Grading

MEFB 799H - Honors Senior Thesis in Marine, Estuarine, and Freshwater Biology
Credits: 2-4
Independent research requiring a written proposal, a thesis, and a final public presentation (e.g. the Undergraduate Research Conference). Intended for MEFB majors completing Honors-in-major requirements. Contact MEFB program coordinator prior to senior year to arrange supervision and obtain permission. Two consecutive semesters. (4 credit minimum total; 8 credits maximum).
Attributes: Honors course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Marketing (MKT) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MKT 510 - Principles of Marketing
Credits: 4
Marketing is the process of planning and executing the conception, pricing, promotion, and distribution of goods and services to maintain relationships that satisfy organizational and individual needs and wants. The course introduces students to terminology, functions, institutions, philosophy, consumer behavior, market decision-making and public policy issues. The course will provide students with the basic framework to understand the role and scope of marketing in the business environment.
Attributes: Writing Intensive Course
Equivalent(s): MGMT 514G, MKTG 514G
Mutual Exclusion: No credit for students who have taken BUS 610.
Grade Mode: Letter Grading

MKT 517 - Consumer Behavior
Credits: 4
This course focuses on consumer behavior in a variety of contexts. Understanding the decision process, attitude, and behavior of buyers is essential to developing marketing plans in today's competitive marketplace; sophisticated customer relationship management approaches are dependent upon knowing the customer. Students consider the major theoretical approaches to consumer behavior and examine how the concepts of affect and cognition, behavior, learning, and the environment can be used to design and maintain an effective marketing strategy. The course also offers students an opportunity to gain a better understanding of their own buying behavior.
Prerequisite(s): MKT 510 with a minimum grade of D- or MKTG 514G with a minimum grade of D-.
Equivalent(s): MKTG 617G
Grade Mode: Letter Grading

MKT 523 - Introduction to Professional Sales
Credits: 4
This course presents students with current knowledge, data, and skills that are applicable in today's competitive business environments. The course provides students with an in-depth awareness of the sales discovery and presentation process within the professional selling environment. Students may demonstrate their persuasive skills in the context of a hypothetical job interview.
Equivalent(s): MKTG 523G
Grade Mode: Letter Grading

MKT 525 - Presentation Excellence in Sales
Credits: 4
This hands-on, highly interactive course prepares students to effectively develop, organize, present, support, and close a powerful program and presentation with confidence and conviction. The focus draws upon listening skill sets, oratory, personal communication social styles, and persuasive/informative techniques that result in the presenter engaging the audience. The course helps students to build competence and confidence through feedback and practice. The course prepares students to deliver persuasive and informative presentations that promote a specific outcome.
Equivalent(s): MKTG 525G
Grade Mode: Letter Grading

MKT 600 - Social Media Marketing
Credits: 4
This course is designed to build students' social media marketing, advertising, and communication skills by utilizing projects that give students hands-on experience implementing social media marketing strategies. The focus of this course will be understanding social media, developing social media marketing strategies, and tracking their effectiveness in an effort to maximize marketing efforts for businesses. It is expected that students have a basic understanding of various social media platforms. This course is NOT about how to use social media; rather it looks at how we can use social media for marketing efforts.
Attributes: Writing Intensive Course
Equivalent(s): MKTG 520G
Grade Mode: Letter Grading

MKT 610 - Marketing Hospitality Organizations
Credits: 4
This course provides a comprehensive overview of the role of marketing in the hotel, restaurant, and travel industries. Students in this course may use case studies and real-world events to explore the theories, principles, and application of both traditional and digital forms of marketing to select groups. This is an experiential course that may include assignments such as the creation of a marketing plan, advertising campaign or social media strategies for a partner organization. The focus of this course centers on the planning, implementation, and evaluating of marketing plans, strategies, budgets, and campaigns.
Prerequisite(s): MKT 510 with a minimum grade of D- or MKTG 514G with a minimum grade of D-.
Equivalent(s): MKTG 610G
Grade Mode: Letter Grading

MKT 612 - Agile Marketing
Credits: 4
Marketing plays a fundamental role within an organization, yet in many organizations, marketing is siloed from other business units, teams, or departments. A successful marketing department must strategically place themselves into the business with innovation and adaptivity. This course may explore agile marketing techniques including outcomes, continuous improvement, and customer needs.
Prerequisite(s): MKT 510 with a minimum grade of D- or MKTG 514G with a minimum grade of D-.
Equivalent(s): MKTG 612G
Grade Mode: Letter Grading

MKT 615 - Digital Storytelling and Brand Management
Credits: 4
This course introduces the role and philosophy of brand management in the strategic marketing process and the resulting effects on strategic and marketing decisions. Students learn to identify and establish brand positioning and values, design branding strategies, and grow and sustain brand equity. Topics may include the strategic brand building process, segmentation and positioning for building brands, consumer behavior, brand information systems, building brand equity, and the application of brand management using marketing principles. Students explore the critical role of brand management in successful marketing strategies.
Prerequisite(s): MKT 510 with a minimum grade of D- or MKTG 514G with a minimum grade of D-.
Equivalent(s): MKTG 615G
Grade Mode: Letter Grading

MKT 618 - Sales Management
Credits: 4
This course focuses on the strategic and tactical aspects of selling and sales force management. The course develops an analytical understanding of the concepts, tools, and techniques of sales management, using real-world marketing problems. Students will apply the principles of personal selling, relationship building, salesforce prospecting, and sales call planning in a simulated sales management environment. Issues concerning international sales, social responsibility, and ethical considerations as they relate to sales management may be addressed.
Prerequisite(s): (MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-) and (MKT 510 with a minimum grade of D- or MKTG 514G with a minimum grade of D-).
Equivalent(s): MGMT 618G, MKTG 618G
Grade Mode: Letter Grading

MKT 645 - Marketing Research
Credits: 4
In this course, students explore the theories and techniques of planning, conducting, analyzing, and presenting market studies. Students may discuss ethical dimensions, emerging trends, and new skills associated with marketing research and how secondary data fit into the research process. Students may examine different methodologies with emphasis on primary research, including questionnaire design. The course addresses the growing role that technology plays in predicting marketing trends, addressing marketing problems, and the development of new products and services.
Prerequisite(s): MKT 510 with a minimum grade of D- or MKTG 514G with a minimum grade of D-.
Equivalent(s): MKTG 515G
Grade Mode: Letter Grading

MKT 705 - Marketing for Nonprofits
Credits: 4
The course explores the use of traditional and nontraditional channels to promote nonprofits to an array of actual and potential audiences for a variety of purposes. Most nonprofit organizations must be visible to the public in order to fulfill their missions. Thus, nonprofit leaders must know how to promote their organizations to current and potential supporters, the broader public, and the mass media. Topics may include program and organizational branding, targeting respective audiences, preparing materials for greatest effect, and applying social media as appropriate.
Equivalent(s): MKTG 605G
Grade Mode: Letter Grading

MKT 720 - Digital Advertising
Credits: 4
Digital technologies have become an integral component of daily life for many organizations and consumers. This class will provide the student with the theoretical understanding of the internet marketplace necessary to adapt to its many changes, while also equipping the student with the skills needed to perform vital daily functions. The course may cover a wide spectrum of topics, including (but not limited to) marketing strategic approaches on the internet, analytics, online reputation management (ORM), digital positioning and branding, email marketing, paid search marketing, and integrated communications on digital media.
Prerequisite(s): MKT 510 with a minimum grade of D- or MKTG 514G with a minimum grade of D-.
Equivalent(s): MKTG 620G
Grade Mode: Letter Grading

MKT 723 - Marketing Design and Usability
Credits: 4
In the field of marketing, creating intuitive market interfaces (website, mobile applications, and e-commerce) is imperative for consumer engagement and retention. This course will explore web design, user interface (UI), user experience (UX), and experiential design principles within the context of digital marketing. Successful design leads to data-driven results. Students may have the opportunity to analyze universal web standards, design fundamentals, interface, usability, and design issues to enhance search engine optimization (SEO) and search engine marketing (SEM).
Prerequisite(s): MKT 510 with a minimum grade of D- or MKTG 514G with a minimum grade of D-.
Equivalent(s): MKTG 623G
Grade Mode: Letter Grading

Marketing (MKTG)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MKTG 520 - Topics in Marketing
Credits: 1-4
Special topics covering a variety of marketing principles, topics vary by semester.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MKTG 530 - Survey of Marketing
Credits: 4
Focuses on marketing as the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives. For business administration minors and non-business administration majors.
Equivalent(s): MKTG 550
Mutual Exclusion: No credit for students who have taken ADMN 585, HMGT 600.
Grade Mode: Letter Grading

MKTG 547 - Promotion and Advertising
Credits: 4
Focuses on advertising and promotions while providing coverage of other marketing communication tools (direct marketing, point-of-purchase, personal selling, public relations). Examines both traditional and electronic/online/digital approaches to advertising and promotions as means to each audiences with messages that support the organization's goals.
Prerequisite(s): MKTG 550 with a minimum grade of D- or MKTG 530 with a minimum grade of D-.
Equivalent(s): MKTG 557
Grade Mode: Letter Grading

MKTG 620 - Topics in Marketing
Credits: 4
Special topics covering a variety of marketing principles, topics vary by semester.
Prerequisite(s): MKTG 550 with a minimum grade of C- or MKTG 530 with a minimum grade of C- or ADMN 585 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MKTG 620T - Topics in Marketing - Study Away
Credits: 4
Special topics covering a variety of marketing principles, topics vary by semester.
Prerequisite(s): MKTG 550 with a minimum grade of C- or MKTG 530 with a minimum grade of C- or ADMN 585 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MKTG 644 - Retail Management in an Omnichannel World
Credits: 4
Success in retail requires managing multiple channels - online, traditional brick & mortar, and hybrid combinations. This course examines a broad range of retail management topics covering retailer types, selection of channels and locations, understanding online and in-store shopper behavior, financial strategy, purchasing, merchandise assortments including across products and services retailing, pricing, visual merchandising, and customer service and experience.
Prerequisite(s): ADMN 585 with a minimum grade of C- or MKTG 550 with a minimum grade of C- or MKTG 535 with a minimum grade of C-.
Equivalent(s): MKTG 754
Grade Mode: Letter Grading

MKTG 649 - Foundations of Personal Selling
Credits: 4
The Foundations of Personal Selling combines heavy experiential learning with the academic principles of relationship selling to prepare students for the professional world. Students learn personal selling as they develop an understanding of, and appreciation for, applying the consultative sales process through partnering with customers. This course is ideal for those exploring a career in sales or simply interested in knowing how to sell their own strengths.
Equivalent(s): MKTG 559, MKTG 759
Grade Mode: Letter Grading

MKTG 650 - Professional Sales Group
Credits: 2
The Professional Sales Group is an elite experiential sales and leadership course where students actively train for, host, and compete in sales competitions and business networking events. These sales role-play competitions use real business case scenarios, with corporate professionals and alumni as buyers & judges, to simulate selling experiences for the students. Students in good standing may retake the course.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MKTG 652 - Digital Marketing Agency
Credits: 2
Voice Z gives students the opportunity to gain real-world marketing experience by working hand in hand with clients to create impactful and innovative digital marketing campaigns. Admission to the course is competitive through an application process each April for the following year. Students accepted into the Voice Z Digital Marketing Agency for the Fall Semester are expected to continue through the Spring semester.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MKTG 689 - Advanced Sales
Credits: 4
Advanced Sales is for students looking to enter a professional sales career upon graduation. This course builds on the consultative and relationship selling processes, concepts and experiences in their sales introductory course. Students learn and practice adaptability through cases, exercises, and role-plays while introducing, and using, increasingly important sales enabling technologies. Key skill components covered include prospecting, time management, and communicating value through storytelling.
Prerequisite(s): MKTG 559 with a minimum grade of C- or MKTG 649 with a minimum grade of C- or MKTG 759 with a minimum grade of C-.
Grade Mode: Letter Grading

MKTG 720 - Topics in Marketing II
Credits: 4
Special topics covering a variety of marketing principles, topics vary by semester.
Prerequisite(s): ADMN 585 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MKTG 720W - Topics in Marketing II
Credits: 4
Special topics covering a variety of marketing principles, topics vary by semester.
Attributes: Writing Intensive Course
Prerequisite(s): ADMN 585 with a minimum grade of C-.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MKTG 750 - Marketing Strategy
Credits: 4
An integrative marketing course designed to provide the student with a cohesive understanding of marketing decision making through the exploration of marketing problems with an emphasis on qualitative analysis as well as strategy formulation. Through the use of case studies, the course is designed for students who want to learn and apply what they learn, and thus emphasizes both the understanding and the application of concepts and practices in marketing strategy. MKTG 752 and/or MKTG 753 are recommended prior to taking this course.
Prerequisite(s): ADMN 585 with a minimum grade of C-.
Equivalent(s): ADMN 750
Grade Mode: Letter Grading

MKTG 752 - Marketing Research
Credits: 4
Understanding fundamental concepts, tools, and methods used in conducting a marketing research study. Taking general managerial problems and structuring them in terms of specific questions amenable to research. Developing a competence in designing and conducting common qualitative and quantitative research (e.g., survey research). Students will learn various statistic techniques commonly used in marketing research and be able to use these analyses to provide managerial recommendations.
Prerequisite(s): ADMN 585 with a minimum grade of C-.
Equivalent(s): ADMN 752
Grade Mode: Letter Grading

MKTG 753 - Consumer/Buyer Behavior
Credits: 4
Covers concepts, models, and theories from the behavioral sciences applied to consumer decision making and purchasing behavior. Examines consumer behavior from economic, psychological, sociological, and anthropological perspectives. Topic coverage includes discussion of marketing strategies and tactics to understand and influence consumer choice.
Attributes: Writing Intensive Course
Prerequisite(s): ADMN 585 with a minimum grade of C-.
Grade Mode: Letter Grading

MKTG 757 - Integrated Marketing Communication
Credits: 4
Provides balanced coverage of all marketing communication tools: advertising, sales promotion, public relations, direct marketing, personal selling, POP, packaging, sponsorships, licensing, and customer service. Emphasizes the integration of these tools to send target audiences a consistent, persuasive message that promotes the organization's goals.
Prerequisite(s): ADMN 585 with a minimum grade of C-.
Grade Mode: Letter Grading

MKTG 760 - International Marketing
Credits: 4
Environmental factors affecting international trade: culture and business customs, political and legal factors and constraints, economic and technological development, and the international monetary system. Integration of these with the marketing management functions of market research and segmentation; product, promotion, distribution, and pricing decisions.
Prerequisite(s): ADMN 585 with a minimum grade of C-.
Equivalent(s): ADMN 760
Grade Mode: Letter Grading

MKTG 763 - Marketing Analytics
Credits: 4
Marketing Analytics introduces students to the fascinating world of marketing analytics. It provides a broad perspective on product, consumer, marketing-mix, and digital analytics areas. It blends the art and science of marketing and orients students to the systematic use of data and empirical models, which enhance the decision-making of a company about its customers, competitors, and the industry.
Prerequisite(s): ADMN 585 with a minimum grade of C- and ADMN 580 (may be taken concurrently) with a minimum grade of C-.
Grade Mode: Letter Grading

MKTG 764 - New Product Development
Credits: 4
Tactical and strategic issues concerned with the development and marketing of product and service innovations. Equips students with the concepts, tools, and approaches useful in the development, management, and marketing of products and services. Provides an integrated experience of the process of uncovering customer problems, understanding these problems, and providing superior solutions.
Prerequisite(s): ADMN 585 with a minimum grade of C-.
Grade Mode: Letter Grading

MKTG 765 - Applications in Digital Marketing
Credits: 4
This class will introduce students to the different disciplines that make up digital marketing in order to better prepare them for roles as either digital marketing generalists (where they will need to appreciate and possess a broad understanding of these disciplines), or as digital marketing specialists, (where they will need to focus on and master one of these disciplines).
Prerequisite(s): ADMN 585 with a minimum grade of C-.
Grade Mode: Letter Grading

MKTG 775 - Marketing Workshop
Credits: 4
This course is open only to senior marketing option students and serves as their capstone learning experience. Students work in small teams on a real-world marketing problem given them by outside business, non-profits, or government agencies. the trams conduct extensive field research, formulate strategy, and then implement, or test marketing campaign ideas and programs. Completion of two of the following courses required prior to taking this course; MKTG 752, MKTG 753, or MKTG 763.
Attributes: Writing Intensive Course
Prerequisite(s): (MKTG 752 with a minimum grade of C- and MKTG 753 with a minimum grade of C-) or (MKTG 752 with a minimum grade of C- and MKTG 763 with a minimum grade of C-) or (MKTG 753 with a minimum grade of C- and MKTG 763 with a minimum grade of C-).
Equivalent(s): MKTG 762
Grade Mode: Letter Grading

Materials Science (MS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MS 401 - Science of Stuff
Credits: 4
Materials Science is a relatively new and fast growing field that studies all types of materials, including metals, ceramics, polymers, semiconductors, and composites. Material Science explores how stuff is put together, how to change stuff and make it better, the properties and applications of stuff, and even how to make totally brand new stuff. This course explores materials from various topic areas, including sports, forensics, medicine and health, fashion, architecture and construction, music and art, food and transportation from the perspective of materials science. Students explore additional materials independently as well as practice the process of science through simple experimentation and data analysis.
Attributes: Physical Science(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

Mathematics & Statistics (MATH)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MATH 400 - Freshman Seminar
Credits: 1
A seminar experience that presents a mathematical culture associated with first-year college mathematics, including the ideas of abstraction, theorem and proof, ad that provides a perspective of the diversity of mathematical areas of research and their interrelationships. Emphasis is on reading and writing mathematics.
Grade Mode: Credit/Fail Grading

MATH 417 - Precalculus for Business and Life Sciences
Credits: 4
Analysis and applications of algebraic and transcendental functions, with a special emphasis on exponential and logarithmic functions, and an introduction to limits and derivatives. The course is intended for students planning to take MATH 422 or MATH 424. Students planning to take MATH 425 should instead enroll in MATH 418. This course is not offered for credit for students in CEPS.
Mutual Exclusion: No credit for students who have taken MATH 418.
Grade Mode: Letter Grading

MATH 418 - Analysis and Applications of Functions
Credits: 0 or 4
Analysis and applications of algebraic and transcendental functions, with special emphasis on exponential, logarithmic, and trigonometric functions. Graphical analysis. Written projects are required on some or all of the following topics: rates of change, optimization, logarithmic or exponential modeling, and trigonometric functions. Intended for students planning to take MATH 425. Not offered for credit if credit is received for MATH 424 or MATH 425.
Attributes: Quantitative Reasoning(Disc)
Mutual Exclusion: No credit for students who have taken MATH 417.
Grade Mode: Letter Grading

MATH 420 - Finite Mathematics
Credits: 0 or 4
Topics selected from probability, systems of linear equations, matrix algebra, linear programming, mathematics of finance. Not a preparation for calculus. Not offered for credit to mathematics majors.
Attributes: Quantitative Reasoning(Disc)
Mutual Exclusion: No credit for students who have taken MATH 422.
Grade Mode: Letter Grading

MATH 421 - Pathways between Mathematics and the Arts
Credits: 4
Exploration of the interaction between mathematics and the arts on numerous levels. The course builds on basic knowledge of elementary number systems to illuminate such topics symmetry, fractals, light, color, sound structures and musical materials. Students immediately apply new knowledge and techniques to make computer generated 2-D and 3-D images, animations and sound/music.
Attributes: Quantitative Reasoning(Disc)
Grade Mode: Letter Grading

MATH 422 - Mathematics for Business Applications
Credits: 0 or 4
Functions, sets and their use in mathematical models in business, economics and finance, including probability, linear systems and mathematics of finance; basic concepts of differential calculus and relevant applications.
Attributes: Quantitative Reasoning(Disc)
Mutual Exclusion: No credit for students who have taken MATH 420.
Grade Mode: Letter Grading
Special Fee: Yes

MATH 424A - Calculus for Social Sciences
Credits: 4
Rational, exponential and logarithmic functions; associated derivatives and their applications; associated antiderivatives and their applications. Applications focus on contexts relevant to majors in the College of Liberal Arts and the Paul College. Not offered for credit to CEPS majors. Repeat rule applies for MATH 425 and MATH 424B. Students wanting a two-semester calculus course are strongly advised to take MATH 425-426. Those students who successfully complete MATH 424A and subsequently wish to continue their study of mathematics with MATH 426 are encouraged to complete supplementary modules available from the Mathematics Center (MaC).
Attributes: Quantitative Reasoning(Disc)
Equivalent(s): MATH 424B, MATH 425
Grade Mode: Letter Grading

MATH 424B - Calculus for Life Sciences
Credits: 0 or 4
Rational, exponential and logarithmic functions; associated with derivatives and their applications; associated with antiderivatives and their applications. Applications focus on contexts relevant to majors in the College of Life Sciences and Agriculture. Not offered for credit for CEPS majors. Repeat rule applies for MATH 425 and MATH 424A. Students wanting a two-semester calculus course are strongly advised to take MATH 425-426. Those students who successfully complete MATH 424B and subsequently wish to continue their study of mathematics with MATH 426 are encouraged to complete supplementary modules available from the Mathematics Center (MaC).
Attributes: Quantitative Reasoning(Disc)
Equivalent(s): MATH 424A, MATH 425
Grade Mode: Letter Grading

MATH 425 - Calculus I
Credits: 0 or 4
Calculus of one variable covering limits, derivatives of algebraic, trigonometric, exponential, and logarithmic functions; applications include curve sketching, max-min problems, related rates, and volume and area problems. Beginning in Spring 2019 students who have taken MATH 418 may not take the placement test as a means of entry into MATH 425. (Repeat rule applies for MATH 424A and MATH 424B).
Attributes: Quantitative Reasoning(Disc)
Prerequisite(s): MATH 418 with a minimum grade of C or ALEKS Math Assessment with a score of 80.
Equivalent(s): MATH 424A, MATH 424B, MATH 425H
Mutual Exclusion: No credit for students who have taken MTH 705.
Grade Mode: Letter Grading

MATH 425H - Honors/Calculus I
Credits: 4
Calculus of one variable covering limits, derivatives of algebraic, trigonometric, exponential, and logarithmic functions; applications include curve sketching, max-min problems, related rates, and volume and area problems. (Not offered for credit if credit is received for MATH 424.)
Co-requisite: INCO 425H
Attributes: Honors course; Quantitative Reasoning(Disc)
Prerequisite(s): MATH 418 with a minimum grade of C or ALEKS Math Assessment with a score of 80.
Equivalent(s): MATH 425
Grade Mode: Letter Grading

MATH 426 - Calculus II
Credits: 0 or 4
Second course in calculus of one argument, techniques and applications of integration, polar coordinates, and series.
Prerequisite(s): MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-.
Equivalent(s): MATH 426H
Mutual Exclusion: No credit for students who have taken MTH 707.
Grade Mode: Letter Grading

MATH 426H - Honors/Calculus II
Credits: 4
Second course in calculus of one argument, techniques and applications of integration, polar coordinates, and series.
Co-requisite: INCO 426H
Attributes: Honors course
Prerequisite(s): MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-.
Equivalent(s): MATH 426
Grade Mode: Letter Grading

MATH 439 - Statistical Discovery for Everyone
Credits: 4
Introduces the framework and concepts for learning with data. Emphasis on statistical discovery in everyday life and on drawing valid conclusion from data. Topics include: good and bad data, data ethics, how to conduct a valid survey, how to describe a population distribution; when to believe a poll; how to design an experimental study; how to avoid ambiguous results caused by "lurking" variables; how to make inference about an entire population based on a sample; how to describe relationships among variables; an understanding of the question of causation and chance in everyday life and in scientific studies, as well as the use and misuse of statistics in explaining what is statistical significance. This course has an activity-based learning component with lab exercises using statistical software for calculations without assuming a calculus background. The course may be used as a preparation for a more technical introductory statistics course. Science and Engineering students should take MATH 539 or MATH 644 according to their programs.
Attributes: Quantitative Reasoning(Disc)
Mutual Exclusion: No credit for students who have taken ADM 430, ADMN 420, ADMN 510, BIOL 528, EREC 525, HHS 540, HMP 540, MATH 539, MATH 644, MTH 701, PSYC 402, PSYC 402H, SOC 402, SOC 402H, SOC 502, SOC 502H.
Grade Mode: Letter Grading

MATH 444 - Excursions in Quantitative Reasoning
Credits: 4
Problems involving quantitative reasoning (most are nontraditional, some are fun, while others are interdisciplinary) designed to inspire curiosity encourages students to formulate and evaluate questions, all the while slowly drawing them into the process of scholarly investigation. In this regard, in addition to traditional mathematics homework, students need to do research outside of class to write and present projects.
Attributes: Quantitative Reasoning(Disc); Inquiry (Discovery)
Grade Mode: Letter Grading

MATH 445 - Mathematics and Applications with MATLAB
Credits: 4
Through the use of the MATLAB computation software, this course reinforces and builds on a student's mathematics foundation and previews more advanced mathematical concepts. The power and limitations of modern computational algorithms to solve real world problems are introduced and shown to influence nearly every aspect of modern society. The state-of-the-art computational tools afforded by MATLAB provide the student with a strategy for enhancing their knowledge and comprehension in subsequent Science, Engineering, or Technology themed courses.
Attributes: Environment,TechSociety(Disc)
Prerequisite(s): MATH 418 with a minimum grade of D- or MATH 424A with a minimum grade of D- or MATH 424B with a minimum grade of D- or MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken IAM 550.
Grade Mode: Letter Grading

MATH 525 - Linearity I
Credits: 6
Approaches intermediate mathematics from a thematic standpoint, using linear structure as a rigorous foundation for developing applications across science and engineering. The course develops a rigorous theory for finite dimensional vector spaces, including solvability and approximation theory. This theory is applied to first order differential equations and differential multivariate calculus. Applications include linear regression, modeling with first order differential equations, a brief introduction to regular perturbation theory, and both constrained and unconstrained optimization problems. Lab.
Prerequisite(s): MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 526 - Linearity II
Credits: 6
Extends the application of the theory of linear spaces developed in 525 to handle systems of linear ordinary differential equations, higher order linear differential equations, Generalized Fourier series and their application to separation of variables for the canonical partial differential equations of mathematical physics, as well as covering multiple integration and vector integration. Green's theorem and the divergence theorem are covered. Lab.
Prerequisite(s): MATH 525 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 527 - Differential Equations with Linear Algebra
Credits: 0 or 4
Fundamental methods of solving first-order equations, essentials of matrix algebra; higher-order linear equations, and linear systems; series solutions; Laplace transforms; selected applications.
Prerequisite(s): MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-.
Equivalent(s): MATH 527H
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

MATH 528 - Multidimensional Calculus
Credits: 0 or 4
Partial differentiation; composite functions and chain rules; maximum and minimum; transformations; vector algebra; vector functions; gradient, divergence, and curl; curves and surfaces; multiple, line, and surface integrals; divergence, Green's and Stoke's theorem.
Prerequisite(s): MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

MATH 531 - Mathematical Proof
Credits: 4
Introduces reading and writing proofs in mathematics. The basic language of mathematics common to all branches of the subject, especially set theory and basic logic.
Attributes: Writing Intensive Course
Prerequisite(s): MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 539 - Introduction to Statistical Analysis
Credits: 0 or 4
A first course introducing concepts of probability and scientific methods for data analysis. Exploratory data analysis, survey sampling, probability, discrete and continuous distributions, confidence intervals, hypothesis testing, comparing samples, linear regression, analysis of variance. Statistical software is used. Offered primarily for mathematics majors; engineering majors should take MATH 644.
Prerequisite(s): MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken ADMN 420, ADMN 510, BIOL 528, COMP 490, EREC 525, HHS 540, HMP 540, MATH 439, MATH 644, PSYC 402, PSYC 402H, SOC 402, SOC 502, SOC 502H.
Grade Mode: Letter Grading

MATH 540 - Probability & Statistics
Credits: 0 or 4
This course provides a rigorous, proof#based introduction to probability and statistics. Core topics include study design, data collection and sampling, exploratory data analysis, probability rules, conditional probability, and Bayes' theorem, discrete and continuous probability distributions, joint distributions, linear combinations of random variables, estimation, hypothesis testing, and one#way Analysis of Variance (ANOVA). The emphasis is on frequentist inference, with a brief comparison to Bayesian ideas. This course is offered primarily for computer science, data science, and statistics majors at the sophomore level.
Prerequisite(s): MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 545 - Introduction to Linear Algebra
Credits: 4
Designed to reinforce ideas seen throughout the mathematics curriculum. Centered on a study of vector spaces and linear systems, beginning with a brief focus on systems of linear equations and progressing to a full discussion of linear transformation and vector spaces. The course includes a survey of properties of matrices, such as rank, kernel, eigenvalues, eigenvectors, and diagonalization.
Attributes: Writing Intensive Course
Prerequisite(s): MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken MATH 645, MATH 762, MTH 709.
Grade Mode: Letter Grading

MATH 601 - Exploring Mathematics for Teachers I
Credits: 4
Provides prospective elementary teachers with the opportunity to explore and master concepts involving number systems and operations, data analysis and probability. Additional topics may include geometry, measurement, and algebraic thinking. Mathematical reasoning, problem solving, and the use of appropriate manipulatives and technology are integrated throughout the course. Readings, class discussions, and assignments focus on mathematics content as well as applicable theories of learning, curriculum resources, and state and national recommendations. The course models instructional techniques that can be adapted to the elementary curricula.
Mutual Exclusion: No credit for students who have taken MATH 621, MATH 623.
Grade Mode: Letter Grading

MATH 624 - Analysis of Secondary School Mathematics A (Number Systems & Functions)
Credits: 4
Examines concepts from secondary school mathematics from the advanced mathematics perspective, emphasizing connecting and logically refining the concepts of number systems, theory of equations, function, limit, sequences, series, and rate of change. Includes an in-depth analysis of problems and topics spanning middle to high-school spectrum at the level of sophistication aligned with other collegiate mathematics courses. The course integrates both a hands-on and proof-based approach to the analysis of secondary mathematics topics.
Prerequisite(s): MATH 531 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 626 - Analysis of Secondary School Mathematics B (Geometry, Statistics, & Probability)
Credits: 4
Examines concepts from secondary school mathematics from the advanced mathematics perspective, emphasizing connecting and logically refining the concepts of geometry, matrices, statistics, modeling, probability, and topics in discrete mathematics. Includes an in-depth analysis of problems and topics spanning middle to high-school spectrum at the level of sophistication aligned with other collegiate mathematics courses. The course integrates both a hands-on and proof-based approach to the analysis of secondary mathematics topics.
Prerequisite(s): MATH 531 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 632 - Financial Mathematics
Credits: 4
A mathematical introduction to interest theory and an overview of mathematical models used to analyze and price standard financial instruments including: interest bearing accounts, stocks and bonds. Introduction to basic concepts used in mathematical finance including: random variables, mathematics of arbitrage, risk and diversification. Includes a substantive introduction to all aspects of the financial mathematics actuarial exam.
Grade Mode: Letter Grading

MATH 644 - Statistics for Engineers and Scientists
Credits: 0 or 4
Introduces the design of controlled experiments and the collection and analysis of scientific data. Other topics include exploratory data analysis, discrete and continuous probability distributions, statistical process control, confidence intervals, hypothesis testing, ANOVA, regression and correlation. The use of a statistical software package is an integral part of the course; interpreting and drawing conclusions from standard software output is emphasized.
Prerequisite(s): MATH 426 (may be taken concurrently) with a minimum grade of D- or MATH 426H (may be taken concurrently) with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken ADM 430, ADMN 420, ADMN 510, BIOL 528, COMP 490, EREC 525, HHS 540, HMP 540, MATH 439, MATH 539, PSYC 402, PSYC 402H, SOC 402, SOC 402H, SOC 502, SOC 502H.
Grade Mode: Letter Grading

MATH 645 - Linear Algebra for Applications
Credits: 4
Fundamental notions of vector space theory, linear independence, basis, span, scalar product, orthogonal bases. Includes a survey of matrix algebra, solution of systems linear equations, rank, kernel, eigenvalues and eigenvectors, the LU- and QR-factorizations, and least squares approximation. Selected applications in mathematics, science, engineering and business.
Prerequisite(s): MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken MATH 545, MATH 762.
Grade Mode: Letter Grading

MATH 647 - Complex Analysis for Applications
Credits: 4
Complex numbers, analytic functions, Cauchy-Riemann equations, conformal mapping, contour integration, Cauchy's integral formula, infinite series, residue calculus, Fourier and Laplace transforms. (Not offered for credit if credit is received for MATH 788.)
Prerequisite(s): MATH 528 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken MATH 788.
Grade Mode: Letter Grading

MATH 696 - Independent Study
Credits: 1-4
Individual projects of study developed by the student and a faculty sponsor. Intended for students with superior scholastic achievement. May be taken as writing intensive. A written proposal, including goals and assessment, endorsed by a faculty sponsor and approved by the department chairperson, must be submitted before registering.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): MATH 696W
Grade Mode: Letter Grading

MATH 696W - Independent Study
Credits: 1-4
Individual projects of study developed by the student and a faculty sponsor. Intended for students with superior scholastic achievement. A written proposal, including goals and assessment, endorsed by a faculty sponsor and approved by the department chairperson, must be submitted before registering.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): MATH 696
Grade Mode: Letter Grading

MATH 700 - Introduction to Mathematics Education
Credits: 4
General background information about mathematics education, such as theories of learning and teaching mathematics, mathematics curricula, classroom management, and techniques for the teaching and learning of mathematics that are common to all levels of mathematics education K-12.
Prerequisite(s): MATH 426 with a minimum grade of D- and EDUC 500 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken EDC 731.
Grade Mode: Letter Grading

MATH 703 - Teaching of Mathematics in Grades K-6
Credits: 4
Methods of teaching mathematics at the elementary school level; uses of technology, manipulatives, models, and diagrams; developing unit and lesson plans; assessment ; instructional formats; teaching reading and writing in mathematics.
Prerequisite(s): MATH 621 with a minimum grade of D- or MATH 601 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken EDC 724, EDC 733.
Grade Mode: Letter Grading

MATH 709 - Teaching of Mathematics in Grades 6-12
Credits: 4
Methods of teaching mathematics at the middle and high school levels; uses of technology, manipulatives, models, and diagrams; developing unit and lesson plans; assessment; instructional formats; teaching reading and writing in mathematics.
Prerequisite(s): MATH 700 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken EDC 733, EDC 734.
Grade Mode: Letter Grading

MATH 732 - Introduction to the R Software
Credits: 1
This course provides a basic introduction to the open-sources statistical software R for students who have never used this software or have never formally learned the basics of it. Topics include: Numeric calculations, simple and advanced graphics, object management and work-flow, RStudio, user-contributed packages, basic programming, writing of functions, statistical modeling and related graphs, distributed computing, reproducible research and document production via markup language.
Equivalent(s): MATH 759
Grade Mode: Credit/Fail Grading

MATH 734 - Statistical Computing
Credits: 4
This is a course on statistics-oriented programming and common computational methodologies used in statistics. Students will learn principles and techniques of sample-splitting, cross-validation, simulation, bootstrap, and optimization, and how to implement them in R. The students will gain experience of reading/modifying, writing and debugging code, and how to speed up computation.
Prerequisite(s): MATH 738 (may be taken concurrently) with a minimum grade of D- or MATH 739 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 736 - Advanced Statistical Modeling
Credits: 4
This is a course on statistical models behind normal linear model. Topics covered in this course include generalized linear model, linear mixed model, generalized additive model, generalized linear mixed model, generalized additive mixed model, and smoothing methods if time allows.
Prerequisite(s): MATH 739 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 737 - Statistical Methods for Quality Improvement and Design
Credits: 4
Six Sigma is a popular, data-focused methodology used worldwide by organizations to achieve continuous improvement of their existing processes, products and services or to design new ones. This course provides a thorough introduction to the Six Sigma principles, methods, and applications for continuous improvement (DMAIC process) and an overview of Design for Six Sigma (DFSS). Both manufacturing and non-manufacturing (transactional Six Sigma) applications are included. Emphasis is placed on the use of case studies to motivate the use of, as well as the proper application of, the Six Sigma methodology. Formal Six Sigma Green Belt certification from UNH may be attained by successfully completing TECH 696.
Prerequisite(s): MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 738 - Data Mining and Predictive Analytics
Credits: 4
An introduction to supervised and unsupervised methods for exploring large data sets and developing predictive models. Unsupervised methods include: market basket analysis, principal components, clustering, and variables clustering. Important statistical and machine learning methods (supervised learning) include: Classification and Regression Trees (CART), Random Forests, Neural Nets, Support Vector Machines, Logistics Regression and Penalized Regression. Additional topics focus on metamodeling, validation strategies, bagging and boosting to improve prediction or classification, and ensemble prediction from a set of diverse models. Required case studies and projects provide students with experience in applying these techniques and strategies. The course necessarily involves the use of statistical software and programming languages. Undergraduate students are required to have junior or senior status to in enroll in this course.
Prerequisite(s): MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

MATH 739 - Applied Regression Analysis
Credits: 4
Statistical methods for the analysis of relationships between response and input variables: simple linear regression, multiple regression analysis, residual analysis and model selection, multi-collinearity, nonlinear curve fitting, categorical predictors, analysis of variance, analysis of covariance, examination of validity of underlying assumptions, logistic regression analysis. Emphasizes real applications with use of statistical software.
Attributes: Writing Intensive Course
Prerequisite(s): MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 740 - Design of Experiments I
Credits: 4
Course in design of experiments with applications to quality improvement in industrial manufacturing, engineering research and development, or research in physical and biological sciences. Experimental factor identification, statistical analysis and modeling of experimental results, randomization and blocking, full factorial designs, random and mixed effects models, replication and sub-sampling strategies, fractional factorial designs, response surface methods, mixture designs, and screening designs. Focuses on various treatment structures for designed experimentation and the associated statistical analyses. Use of statistical software.
Prerequisite(s): MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 741 - Survival Analysis
Credits: 4
Explorations of models and data-analytic methods used in medical, biological, and reliability studies. Event-time data, censored data, reliability models and methods, Kaplan-Meier estimator, proportional hazards, Poisson models, loglinear models. The use of statistical software, such as SAS, JMP, or R, is fully integrated into the course. (Offered in alternate years in the spring semester.)
Prerequisite(s): MATH 739 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 743 - Time Series Analysis
Credits: 4
An introduction to univariate time series models and associated methods of data analysis and inference in the time domain and frequency domain. Topics include: auto regressive (AR), moving average (MA), ARMA and ARIMA processes, stationary and non-stationary processes, seasonal ARIMA processes, auto-correlation and partial auto-correlation functions, identification of models, estimation of parameters, diagnostic checking of fitted models, forecasting, spectral density function, periodogram and discrete Fournier transform, linear filters, parametric spectral estimation, dynamic Fournier analysis. Additional topics may include wavelets and long memory processes (FARIMA) and GARCH Models. The use of statistical software, such as JMP, or R, is fully integrated into the course. Offered in alternate years in the spring semester.
Prerequisite(s): MATH 739 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 744 - Design of Experiments II
Credits: 4
A second course in design of experiments, with applications in quality improvement and industrial manufacturing, engineering research and development, research in physical and biological sciences. Covers experimental design strategies and issues that are often encountered in practice: complete and incomplete blocking, partially balanced incomplete blocking (PBIB), partial confounding, intra and inter block information, split plotting and strip plotting, repeated measures, crossover designs, Latin squares and rectangles, Youden squares, crossed and nested treatment structures, variance components, mixed effects models, analysis of covariance, optimizations, space filling designs, and modern screening design strategies.
Prerequisite(s): MATH 740 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 745 - Foundations of Applied Mathematics I
Credits: 4
An introduction to Partial Differential Equations (PDEs) and associated mathematical methods and the analytical foundation for applied mathematics. Topics include: PDE classification, superposition, separation of variables, orthonormal functions, completeness, convergence, Fourier Series, Sturm-Liouville eigenvalue problems, and eigenfunctions. Methods are introduced for the analysis and solution of boundary value problems, in particular, the Heat, Wave, and Laplace equations.
Prerequisite(s): MATH 527 with a minimum grade of D- and MATH 528 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 747 - Introduction to Nonlinear Dynamics and Chaos
Credits: 4
The mathematics of chaos and nonlinear dynamics. Topics include linear and nonlinear systems of ordinary differential equations, discrete maps, chaos, phase plane analysis, bifurcations and computer simulations.
Prerequisite(s): MATH 527 with a minimum grade of D- and MATH 528 with a minimum grade of D- and MATH 645 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 753 - Introduction to Numerical Methods I
Credits: 4
Introduces mathematical algorithms and methods of approximation. Topics include a wide survey of approximation methods. Methods examined include polynomial interpolation, root finding, numerical linear algebra, numerical integration, and the approximation of differential equations. Included in each case is a study of the accuracy and stability of a given technique, as well as its efficiency.
Prerequisite(s): MATH 426 with a minimum grade of D- and (MATH 445 with a minimum grade of D- or CS 410C with a minimum grade of D- or CS 410P with a minimum grade of D- or IAM 550 with a minimum grade of D-).
Grade Mode: Letter Grading

MATH 755 - Probability with Applications
Credits: 4
Introduces the theory, methods, and applications of randomness and random processes. Probability concepts, random variable, expectation, discrete and continuous probability distributions, joint distributions, conditional distributions; moment-generating functions, convergence of random variables.
Prerequisite(s): MATH 528 with a minimum grade of D- and (MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-).
Grade Mode: Letter Grading

MATH 756 - Principles of Statistical Inference
Credits: 4
Introduces the basic principles and methods of statistical estimation and model fitting. One- and two-sample procedures, consistency and efficiency, likelihood methods, confidence regions, significance testing, Bayesian inference, nonparametric and re-sampling methods, decision theory.
Prerequisite(s): MATH 755 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 757 - Mathematical Optimization for Applications
Credits: 4
This course introduces the foundations of mathematical optimization and reinforces them via applications. The content includes convex optimization, first and second-order methods, constrained problems, duality, linear and quadratic programming, as well as discrete and non-convex optimization. Applications will focus on machine learning methods but also include problems from engineering and operations research. Programming proficiency in MATLAB, R, Java, C, Python, or equivalent is required prior to taking this course.
Prerequisite(s): MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-.
Equivalent(s): CS 757
Grade Mode: Letter Grading

MATH 760 - Geometry
Credits: 4
Advanced approach to fundamental properties of Euclidean and other geometries through deductive reasoning and proof.
Attributes: Writing Intensive Course
Prerequisite(s): MATH 531 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 761 - Abstract Algebra
Credits: 4
This course establishes the axiomatic framework that underlies number systems and similar mathematical structures, investigating basic properties of groups, rings, fields and their homomorphisms.
Attributes: Writing Intensive Course
Prerequisite(s): MATH 531 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 763 - Abstract Algebra II
Credits: 4
This course extends the investigations of MATH 761 into more specialized situations related to old and new problems in mathematics, such as the nature of solutions of polynomial equations. It presents advanced properties of groups, rings, fields and their applications.
Prerequisite(s): MATH 761 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 765 - Introduction to Commutative Algebra and Algebraic Geometry
Credits: 4
Methods of determining solution sets of polynomial systems; affine varieties and their ideals; the 'algebra-geometry correspondence'; theory and applications of Grobner bases.
Prerequisite(s): MATH 761 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 767 - One-Dimensional Real Analysis
Credits: 4
Theory of limits, continuity, differentiability, and integrability.
Attributes: Writing Intensive Course
Prerequisite(s): MATH 531 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 768 - Real Analysis II
Credits: 4
Theory of integration; series; power series and uniform convergence of power series.
Prerequisite(s): MATH 767 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 769 - Introduction to Differential Geometry
Credits: 4
Introduction to the study of geometric properties of curves and surfaces in 3-dimensional space.
Prerequisite(s): MATH 527 with a minimum grade of D- and MATH 528 with a minimum grade of D- and MATH 645 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 770 - Foundations of Number Theory
Credits: 4
Factorization and prime numbers, arithmetic functions, congruences, reciprocity laws, quadratic forms, Diophantine equations, computational number theory. Offered in alternate years.
Prerequisite(s): MATH 531 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 772 - Combinatorics
Credits: 4
Graph theory (including planar graphs, graph coloring, Hamiltonian circuits, trees); counting principles (including permutations, combinations, pigeonhole principle, inclusion-exclusion principle); and related topics.
Prerequisite(s): MATH 531 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 783 - Set Theory
Credits: 4
Axiomatic set theory, including its history. Cantor's theory of infinite cardinal and ordinal numbers seemed laden with contradictions and paradoxes. A satisfactory treatment of these difficulties came with the axiomatic set theory of Zermelo and Fraenkel. This course develops the Zermelo-Fraenkel axioms and examines cardinal and ordinal arithmetic in the context they provide. The course then investigates the consequences of various additional axioms extending Zermelo-Fraenkel, such as the Axiom of Choice, the Continuum Hypothesis, large cardinal axioms of determinacy. Offered in alternate years.
Prerequisite(s): MATH 531 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 784 - Topology
Credits: 4
Open sets, closure, base, and continuous functions; connectedness, compactness, separation axioms, and metrizability.
Attributes: Writing Intensive Course
Prerequisite(s): MATH 767 with a minimum grade of D-.
Grade Mode: Letter Grading

MATH 788 - Complex Analysis
Credits: 4
Complex functions, sequences, limits, differentiation and Cauchy-Riemann equations, elementary functions, Cauchy's theorem and formula, Taylor's and Laurent's series, residues, conformal mapping. Not offered for credit if credit is received for MATH 647.
Prerequisite(s): MATH 767 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken MATH 647.
Grade Mode: Letter Grading

MATH 790 - Historical Foundations of Mathematics
Credits: 4
Historical development of number theory, geometry, probability, algebra, and analysis. Study of the significant mathematical contributions to these topics made by prominent mathematicians spanning several historical periods.
Attributes: Writing Intensive Course
Prerequisite(s): MATH 531 with a minimum grade of D- or MATH 545 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken MTH 706.
Grade Mode: Letter Grading

MATH 797 - Senior Seminar
Credits: 4
Exploration of mathematical topics beyond the student's previous coursework in the seminar format. The course focus is on independent research, collaborative work and classroom engagement; oral presentations and written work are required.
Grade Mode: Letter Grading

MATH 798 - Senior Project
Credits: 4
Students work either individually or as a group under the direction of a faculty sponsor to plan and carry out an independent research project resulting in a written report and presentation to the department. Students must submit a written proposal approved by a faculty sponsor and by the department chairperson before registering.
Grade Mode: Letter Grading

MATH 799 - Senior Thesis
Credits: 2-4
Students work under the direction of a faculty sponsor to plan and carry out independent research resulting in a written thesis. Required for honors-in-major. Students must submit a written proposal approved by a faculty sponsor and by the department chairperson before registering.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

Mathematics (MTH) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MTH 402 - Math for Our World
Credits: 4
This course takes an integrated approach to the study of mathematics, combining mathematical concepts with applications in the real world. It addresses topics in mathematics necessary in a college education, providing the reasoning strategies needed for mathematical problem solving in the workplace, the media, and everyday life. The course serves as the foundation for higher-level math courses and provides the quantitative skills necessary to be adequately prepared for coursework in other academic areas. The overarching goal is to learn to interpret quantitative and statistical information that we encounter daily. Students will understand how real-world problems can be analyzed using the power and rigor of mathematical and statistical models. Topics include: problem solving, math of finance, geometry, basic probability, and beginning statistical concepts with an emphasis on real world applications and interpreting information. The use of Excel will be incorporated into the topics of this course. Acceptable scores on Accuplacer Arithmetic and Elementary Algebra Accuplacer Classic or Next Generation Accuplacer assessments; or approved exemption based on previous high school transcripts: a grade of C or better in both Algebra and Geometry taken within the last five years; or SAT Math score of 500+ or ACT Math score of 18+ taken within five years of registration; or successful completion of the ALEKS Program Math Tutorial as determined by the college's math faculty required. Accuplacer or ALEKS assessments should be completed within five years of registering for course.
Attributes: Mathematics (Gen Ed); Quantitative Reasoning(Disc)
Prerequisite(s): (Classic Arithmetic Accuplacer with a score of 080 and CL Elem Algebra - Accuplacer with a score of 036) or (Arithmetic Accuplacer-Next Gen with a score of 263 and Quant,Alg,Stats Accp-Next Gen with a score of 237) or C MATH 405/or taken elsewhere with a score of WAIV or SAT Math with a score of 500 or ACT Reading with a score of 18 or GSC Math Workshop Completed with a score of WAIV.
Equivalent(s): MATH 502G
Grade Mode: Letter Grading

MTH 504 - Statistics
Credits: 4
This course addresses introductory statistical concepts, methods, and procedures important for making well-informed decisions in real world settings. It provides students with both theoretical principles and practical skills in statistics. Topics include an overview of descriptive and inferential statistics, specifically sampling, measurements of central tendency and dispersion, frequency distributions, graphing techniques, probability theory, hypothesis testing, normal distribution, regression and correlation, t-tests, and analysis of variance. An acceptable score on the Classic or Next Generation Accuplacer arithmetic and elementary algebra assessment. Accuplacer assessments should be completed within five years of registering for course. NOTE: Excel proficiency is expected prior to enrollment in this course.
Attributes: Mathematics (Gen Ed); Quantitative Reasoning(Disc)
Prerequisite(s): MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D-.
Equivalent(s): MATH 504G
Mutual Exclusion: No credit for students who have taken BUS 430, PSYC 402, PSYC 402H, SOC 402, SOC 402H, SOC 502, SOC 502H.
Grade Mode: Letter Grading

MTH 510 - Pre-Calculus
Credits: 4
This course is intended as a bridge course between algebra and calculus. The course focuses on strengthening the student's mathematical problem solving skills and developing a firm understanding of functions, their graphical representation, their behavior, and their use to model real-life situations. Various classes of functions will be highlighted: polynomials, rational, exponential, logarithmic, and trigonometric. Topics may also include: algebraic concepts, real number system, systems of equations and inequalities, complex numbers, and polar coordinates. An acceptable score on the Classic or Next Generation Accuplacer assessment(s) is accepted prior to taking this course. Accuplacer assessments should be completed within five years of registering for course. A graphing calculator is required.
Attributes: Mathematics (Gen Ed); Quantitative Reasoning(Disc)
Prerequisite(s): MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D-.
Equivalent(s): MATH 510G
Grade Mode: Letter Grading

MTH 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topic in mathematics. Course content will change from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): MATH 544G
Grade Mode: Letter Grading

MTH 701 - Probability and Statistics
Credits: 4
In this course students study topics in data analysis including: descriptive and inferential statistics, probability, odds and fair games, probability distributions, normal distributions, and estimation. Among the topics are numerical and graphical summaries for one and two variables, linear regression and correlation, confidence intervals and tests concerning means, sampling and experimentation, basic probability, confidence intervals, hypothesis testing, sampling distributions, two-sample t-tests for means, chi-squared tests, regress and correlation, and possible other topics. A standards statistical software package is used throughout the course to support the course format that includes: hands-on activities, computer-based simulations, creating and implementing student developed investigations, and actual secondary and middle school mathematics classroom activities. Throughout the course students are given opportunities to relate the mathematical concepts studied in this course to the mathematical concepts they will be teaching.
Prerequisite(s): MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D-.
Equivalent(s): MATH 603G
Mutual Exclusion: No credit for students who have taken MATH 439, MATH 623, PSYC 402, SOC 402, SOC 402H, SOC 502.
Grade Mode: Letter Grading

MTH 702 - Mathematical Proof
Credits: 4
This course introduces students to the language and methods used to create and write mathematical proofs and solve problems. Methods of proof will include: direct, contrapositive, contradiction, and induction. Methods of problem solving will be based on Polya's four steps for problem solving. Students will learn about and utilize the many functions of proof including: verification, explanation, communication, discovery, justification, and inquiry. The course will also explore the relationship between problem solving and the process of proving. Students will explore fundamental abstract concepts in mathematics chosen from the following areas: functions and relations, set theory, number theory, and logic, Euclidian and non-Euclidian geometry, algebra, mathematical reasoning, proof, and problem solving. Connections to middle and secondary school mathematics.
Prerequisite(s): MTH 510 with a minimum grade of D- or MATH 510G with a minimum grade of D-.
Equivalent(s): MATH 600G
Grade Mode: Letter Grading

MTH 703 - Number Systems
Credits: 4
This course examines the structure and properties of mathematics while focusing on the development of mental mathematics strategies and problem solving skills. Topics include sets, functions, applications of rational numbers, integers, fractions, decimals, percentages, and number theory. Appropriate grade level techniques are utilized to investigate algorithms, probability and statistics, counting techniques, scientific notation, complex numbers, exponents, geometry, and measurement. Students will also investigate ratios, proportion, data analysis, patterns, and the connections to algebra and geometry topics in the context of the 5-12 grades mathematics curriculum.
Prerequisite(s): MTH 702 with a minimum grade of D-.
Equivalent(s): MATH 601G
Mutual Exclusion: No credit for students who have taken MATH 621.
Grade Mode: Letter Grading

MTH 704 - Geometric Structures
Credits: 4
This course will examine concepts in Euclidean and non-Euclidean geometries. Course topics include area and volume, two- and three-dimensional perspective, congruence and similarity, properties of and relationships among geometric shapes and structures. Students will investigate graphing, vectors, motion, and symmetry. Students engage in course concepts through proofs, problem solving, dynamic geometric software, and through activities used in secondary and middle school mathematics. Throughout the course students will be given opportunities to relate the mathematical concepts studied to the mathematical concepts they will be teaching.
Prerequisite(s): MTH 702 with a minimum grade of D-.
Equivalent(s): MATH 602G
Mutual Exclusion: No credit for students who have taken MATH 622.
Grade Mode: Letter Grading

MTH 705 - Calculus I
Credits: 4
This course is the first semester of a calculus sequence dealing with applications and modeling of the differential and integral calculus. The course focuses on functions and their graphs, limits, continuity, differentiation, integration, the derivative and its uses in optimization and mathematical modeling, as well as the Fundamental Theorem. Throughout the course students are given opportunities to relate the mathematical concepts studied to the mathematical concepts they will be teaching. Graphing calculators are used throughout the course to explore and represent concepts.
Prerequisite(s): MTH 510 with a minimum grade of D- or MATH 510G with a minimum grade of D-.
Equivalent(s): MATH 606G
Mutual Exclusion: No credit for students who have taken MATH 425.
Grade Mode: Letter Grading

MTH 706 - History of Mathematics
Credits: 4
This course addresses the historical development of major themes in mathematics, including calculation, numbers, geometry, algebra, infinity, and formalism in various civilizations ranging from the antiquity of Babylonia and Egypt through classical Greece, the Middle and Far East, and on to modern Europe. The course emphasizes how earlier civilizations influenced or failed to influence later ones and how the concepts evolved in these various civilizations.
Prerequisite(s): (MTH 705 with a minimum grade of D- or MATH 606G with a minimum grade of D-) and MTH 702 with a minimum grade of D-.
Equivalent(s): MATH 608G
Mutual Exclusion: No credit for students who have taken MATH 790.
Grade Mode: Letter Grading

MTH 707 - Calculus II
Credits: 4
This course is the second semester of a calculus sequence dealing with applications of differential and multivariable calculus. Topics include the calculus of transcendental functions, applications of integration, some differential equations, sequences and series, differentiation and integration of trigonometric functions multidimensional calculus with applications, and an introduction to multivariable calculus. Throughout the course students are given opportunities to relate the mathematical concepts studies to the mathematical concepts they will be teaching. Graphing calculators are used throughout the course to explore and represent concepts.
Prerequisite(s): MTH 705 with a minimum grade of D- or MATH 606G with a minimum grade of D-.
Equivalent(s): MATH 607G
Mutual Exclusion: No credit for students who have taken MATH 426.
Grade Mode: Letter Grading

MTH 708 - Discrete Mathematics
Credits: 4
This course is designed to introduce students to discrete and abstract mathematical topics. Topics include propositional and predicate logic; elementary set theory; introduction to proof techniques including mathematical induction; sets, relations, functions, and relations; recurrence relations, graph theory, as well as the properties of groups, rings, and fields. Students study number systems, mathematical induction, algorithms and complex number systems, matrix manipulation, combinatorics, graph theory, and finite differences. Course activities are based on secondary and middle school mathematics curricula. This course considers the basic objects of mathematics through real-world examples and the methods used to elucidate their properties.
Prerequisite(s): MTH 705 with a minimum grade of D- or MATH 606G with a minimum grade of D- or MTH 703 with a minimum grade of D-.
Equivalent(s): MATH 605G
Grade Mode: Letter Grading

MTH 709 - Topics in Linear and Abstract Algebra
Credits: 4
This course examines concepts in algebra including: patterns and functions, arithmetic sequences, geometric sequences, arithmetic and algebra of the integers, least common multiple and greater common divisor, inequalities, modular arithmetic and systems of numbers, properties of groups and fields, the field of complex numbers, polynomial arithmetic and algebra, linear equations. The course develops the mathematical structures, algebraic properties, and applications of matrices, determinants, vectors, vector spaces, systems of linear equations, and linear transformations. Students engage with these concepts through exploration, analysis, proof, and problem solving based on activities used in secondary and middle school mathematics. Throughout the course students are given opportunities to relate the mathematical concepts studied to the mathematical concepts they will be teaching.
Prerequisite(s): MTH 707 with a minimum grade of D- or MATH 607G with a minimum grade of D- or MTH 708 with a minimum grade of D-.
Equivalent(s): MATH 604G
Mutual Exclusion: No credit for students who have taken MATH 545.
Grade Mode: Letter Grading

MTH 710 - Algebra Theory for Middle School Teachers
Credits: 4
This course will examine concepts in algebra including patterns and functions, arithmetic sequences, geometric sequences, arithmetic and algebra of the integers, least common multiple and greatest common divisor, inequalities, modular arithmetic and systems of numbers, basic properties of groups and fields, and polynomial arithmetic and algebra. This course will develop mathematical structures, algebraic properties, and applications of matrices. Students will engage with these concepts through exploration, analysis, proof, and problem solving based on activities used in middle school mathematics. Throughout the course students will be given opportunities to relate the mathematical concepts studied to the mathematical concepts they will be teaching.
Prerequisite(s): MTH 708 with a minimum grade of D-.
Equivalent(s): MATH 609G
Mutual Exclusion: No credit for students who have taken MATH 625.
Grade Mode: Letter Grading

MTH 744 - Special Topics: Upper Level
Credits: 1-4
A study of current and variable topics in mathematics. Course content will change from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): MATH 644G
Grade Mode: Letter Grading

Mechanical Engineering (ME)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ME 400 - Mechanical Engineering First Year Seminar
Credits: 1
This course serves as an introduction to success strategies for Mechanical Engineering students, who are new to the University of New Hampshire's College of Engineering and Physical Sciences. Emphasis will be on skills needed to be successful as a Mechanical Engineering student, including academic support resources, specific career opportunities, and professional development.
Grade Mode: Credit/Fail Grading

ME 441 - Introduction to Engineering Design and Solid Modeling
Credits: 0 or 4
Why are some products better than others? What is the definition of "better"? This course uses an inquiry-guided approach to explore the product design process via team design projects and laboratory exercises. Everyday products are examined from historical, societal, design, safety and manufacturing perspectives. Topics include ideation, sketching, design constraints, solid modeling, decision making, statistical quality control, manufacturing methods and engineering analysis. Students develop an appreciation for good design and the ability to communicate design ideas via 3-D solid models, written and oral reports.
Attributes: Inquiry (Discovery); Writing Intensive Course
Prerequisite(s): MATH 418 with a minimum grade of D- or MATH 425 (may be taken concurrently) with a minimum grade of D- or MATH 425H (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

ME 477 - Introduction to Solid Modeling
Credits: 1
Introduction to solid modeling and engineering drawings using computer-aided design software. For Mechanical Engineering students, this course can only be taken with permission as an alternative to the required ME 441 Introduction to Engineering Design and Solid Modeling for students with extensive engineering design experience (e.g., high school or another university course), an engineering project based program (e.g., FIRST Robotics or Project Lead the Way), or similar experience (e.g., working in the industry). Students should not take both ME 441 and ME 477. Lecture and Lab.
Grade Mode: Letter Grading

ME 503 - Thermodynamics
Credits: 3
Properties of a pure substance, work and heat, laws of thermodynamics, entropy, thermodynamic relations, cycles.
Prerequisite(s): (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-) and (CHEM 405 (may be taken concurrently) with a minimum grade of D- or CHEM 403 (may be taken concurrently) with a minimum grade of D-) and (MATH 528 (may be taken concurrently) with a minimum grade of D- or MATH 526 (may be taken concurrently) with a minimum grade of D-).
Grade Mode: Letter Grading

ME 525 - Statics
Credits: 4
Introduces statics. Two- and three-dimensional force systems, the concept of equilibrium, analysis of trusses and frames, centroids, bending moment and shear force diagrams, and friction.
Prerequisite(s): ((PHYS 407 with a minimum grade of C or PHYS 407S with a minimum grade of C or PHYS 407H with a minimum grade of C) and (MATH 426 with a minimum grade of C+ or MATH 426H with a minimum grade of C+)) or ((PHYS 407 with a minimum grade of C+ or PHYS 407S with a minimum grade of C+ or PHYS 407H with a minimum grade of C+) and (MATH 426 with a minimum grade of C or MATH 426H with a minimum grade of C)).
Equivalent(s): CEE 500
Grade Mode: Letter Grading

ME 526 - Mechanics of Materials
Credits: 3
Introduces strength of materials. Analysis of members under torsion, axial, shear and bending stresses, superposition of stresses, stability of columns.
Attributes: Writing Intensive Course
Prerequisite(s): ME 525 with a minimum grade of D- or CEE 500 with a minimum grade of D-.
Equivalent(s): CEE 501
Grade Mode: Letter Grading

ME 561 - Introduction to Materials Science
Credits: 4
The concepts of materials science and the relation of structure of material properties. Atomic structure, bonding material transport, mechanical properties of materials, solidification, phase diagrams, solid state transformations, and corrosion and oxidation. Laboratory exercises are carried out to demonstrate the basic concepts of the course.
Attributes: Writing Intensive Course
Prerequisite(s): (MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-) and (CHEM 403 with a minimum grade of D- or CHEM 405 with a minimum grade of D-).
Equivalent(s): ME 661
Grade Mode: Letter Grading

ME 603 - Heat Transfer
Credits: 3
Analysis of phenomena; steady-state and transient conduction, radiation, and convection; engineering applications.
Prerequisite(s): MATH 527 with a minimum grade of D- and ME 608 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 608 - Fluid Dynamics
Credits: 0 or 3
Dynamics and thermodynamics of compressible and incompressible fluid flow; behavior of fluids as expressed by hydrostatic, continuity, momentum, and energy equations.
Prerequisite(s): ME 503 with a minimum grade of D- and (MATH 527 (may be taken concurrently) with a minimum grade of D- and IAM 550 (may be taken concurrently) with a minimum grade of D-).
Equivalent(s): ME 508
Grade Mode: Letter Grading

ME 627 - Dynamics
Credits: 3
Introduction to particle and rigid body dynamics. Rectilinear and curvilinear motion, translation and rotation, momentum and impulse principles, and work-energy relationships.
Attributes: Writing Intensive Course
Prerequisite(s): ME 525 with a minimum grade of D- or CEE 500 with a minimum grade of D-.
Equivalent(s): CIE 527, ME 527
Grade Mode: Letter Grading

ME 643 - Machine Design
Credits: 3
Analysis, synthesis, and design of machine elements and systems. Development of engineering judgment; selection of materials stress and failure analysis; kinematic arrangement design for finite and infinite life. Open-ended design problems unify course topics.
Attributes: Writing Intensive Course
Prerequisite(s): (ME 526 with a minimum grade of D- or CEE 501 with a minimum grade of D-) and ME 561 with a minimum grade of D- and ME 627 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 646 - Experimental Measurement and Data Analysis
Credits: 0 or 4
Basic and advanced techniques of engineering and scientific parameter measurement including statistical data and error analysis, curve fitting, calibration and application of transducers, and technical writing. Laboratory experiments draw on concepts from mechanics, thermodynamics, and fluid mechanics.
Attributes: Writing Intensive Course
Prerequisite(s): (ME 526 with a minimum grade of D- or CEE 501 with a minimum grade of D-) and ME 608 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

ME 670 - Systems Modeling, Simulation, and Control
Credits: 4
Lumped parameter models for mechanical, electrical, thermal, fluid, and mixed systems. Matrix representation, eigenvalues, eigenvectors, time domain solutions, frequency response plots, and computer simulations are used to explore system response. Design of system for desired responses. Introduces feedback control, stability, and performance criteria.
Attributes: Writing Intensive Course
Prerequisite(s): ECE 537 with a minimum grade of D- and ME 627 with a minimum grade of D- and MATH 527 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 701 - Transport and Mixing in the Environment
Credits: 3
This course will cover the application of fluid mechanics to transport and mixing in the environment. The class will cover the derivation and solutions to the differential form of mass conservation equations, fundamentals of turbulence, turbulent diffusion, and shear dispersion in steady and oscillatory flows and the effects of stratification. Application to rivers, wetlands, lakes, estuaries, the coastal ocean, and the lower atmosphere.
Prerequisite(s): ME 608 with a minimum grade of D- or CEE 650 with a minimum grade of D- or CHE 601 with a minimum grade of D- or ESCI 654 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 705 - Thermal System Analysis and Design
Credits: 4
Engineering design of thermal systems that involve real problems and analysis of performance of the design. Design criteria include function, performance, optimization, economy, safety, and others as appropriate for the system. Required for ME seniors.
Co-requisite: ME 608
Attributes: Writing Intensive Course
Prerequisite(s): ME 503 with a minimum grade of D-.
Equivalent(s): ME 605
Grade Mode: Letter Grading

ME 706 - Renewable Energy: Physical and Engineering Principles
Credits: 3
The goal of this course is to become "Fluent in energy" and to learn about the engineering fundamentals of renewable energy technologies. The course will begin by giving an overview of U.S. energy usage and sources, as well as history and trends. Various renewable energy topics will then be discussed. Where applicable, topics will be discussed in detail from a fluid and thermal sciences point of view. Guest lecturers and a field trip may be included. This course is open to all engineering seniors.
Prerequisite(s): ME 608 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 707 - Analytical Fluid Dynamics
Credits: 4
Kinematics of flow; constitutive relationships; development of the Navier-Stokes equations; vorticity theorems; potential flow.
Prerequisite(s): ME 608 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 709 - Computational Fluid Dynamics
Credits: 3
Conservation of mass, momentum, and energy, discretization schemes, boundary and initial conditions, turbulence and turbulence models, two-equation models, CFD software such as OpenFOAM, best practice guidelines for CFD. The class incorporates the use and creation of Open Educational Resources (OER).
Grade Mode: Letter Grading

ME 710 - Experimental Fluid Dynamics
Credits: 4
This is a senior/graduate level course that will introduce students to a variety of experimental methods and techniques for the measurement of fluid flows. Topics include signal processing and analysis, thermal anemometry, image velocimetry, and infrared fluid sensing. The knowledge gained in this course is intended to help students carry out advanced research in fluid mechanics at the graduate level or in an industrial research lab setting.
Prerequisite(s): ME 603 with a minimum grade of D- and ME 608 with a minimum grade of D- and ME 646 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 712 - Waves in Fluids
Credits: 3
Linear and nonlinear dynamics of hyperbolic and dispersive wave systems with application to acoustic waves, surface and internal gravity waves, Rossby waves, and capillary waves. Key physical concepts include wave-generation mechanisms, wavelength and amplitude dispersion, group velocity and energy propagation, steady streaming, and mode interactions.
Prerequisite(s): ME 608 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 717 - Marine Robotics and Applications
Credits: 3
The purpose of this course is to cover (in lecture and lab format) the broad spectrum of marine vehicles and applications, as well as what is involved in designing and building robotic vehicles for specific missions. Course topics include: marine applications, sensors for marine environments, vehicle subsystems, ocean and open water environment, dynamic modeling and control, and design/fabrication.testing. Various invited speakers (both scientists and engineers) provide learning modules on various marine robotic related topics.
Prerequisite(s): ME 670 with a minimum grade of D-.
Equivalent(s): OE 717
Grade Mode: Letter Grading

ME 726 - Fracture Mechanics
Credits: 4
The goal is to acquaint the student with understanding of the basic principles behind the derivation of the most common linear and non-linear fracture mechanical equations. The aim is also to gain knowledge in analytical predictions of the failure of materials and become familiar with the ongoing fracture mechanical research. The motivation for this course is that many practical problems in mechanical engineering, manufacturing and materials science have to do with material deformation and failure.
Prerequisite(s): ME 526 with a minimum grade of D- and ME 561 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 727 - Advanced Mechanics of Solids
Credits: 4
Stress, strain, stress-strain relations, anisotropic behavior, introduction to elasticity, plane stress/strain, bending and torsion of members with general cross-sections introduction to thin plates and shells, energy methods.
Prerequisite(s): ME 526 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 742 - Materials Processing in Manufacturing
Credits: 4
Description and analysis of major material shaping processes in modern manufacturing. Casting: fluid flow and heat transfer, solidification, casting processes, properties of cast components and geometric capabilities. Forming: plasticity and formability, bulk and sheet metal forming processes, properties of formed components and geometric capabilities. Machining: cutting forces and tool wear, machining processes, properties of machined components and geometric capabilities. Overview of some non-conventional processes. Lab demonstrations.
Prerequisite(s): ME 526 with a minimum grade of D- and ME 561 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 743 - Satellite Systems, Dynamics, and Control
Credits: 3
General satellite systems with emphasis on spacecraft dynamics and control. Topics include general satellite information such as types of satellites, missions, and orbits, as well as satellite subsystems. Basic spacecraft dynamics and orbital mechanics topics are covered. Advanced topics include attitude and orbit estimation, and automatic attitude control.
Prerequisite(s): ME 670 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 747 - Experimental Measurement and Modeling of Complex Systems
Credits: 0 or 4
Experimental measurements for evaluation, design, and control of mechanical, electrical, and thermal/fluid phenomena. Emphasizes the dynamic response of both sensors and systems and the interactions between physical processes. Experimental examples are drawn from mechanics, material science, thermal-fluid science and controls.
Attributes: Writing Intensive Course
Prerequisite(s): ME 646 with a minimum grade of D- and ME 670 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 755 - Senior Design Project I
Credits: 2
Part I of this two-part sequence emphasizes problem definition, analysis, development of alternative concepts, decision-making processes, synthesis of an optimum solution and the development of a conceptual design. Lectures on these and other topics are combined with seminars given by professionals from industry, government, and academia. Related topics include ISO9000 quality systems, engineering management, design review process, engineering economics, team building and communications. Students are organized into project teams to develop a conceptual design. Formal design reviews are conducted. A formal proposal documents the semester's work.
Attributes: Writing Intensive Course
Equivalent(s): ME 656
Grade Mode: Letter Grading

ME 756 - Senior Design Project II
Credits: 2
Continuation of Senior Design Project I, in which the proposal submitted in the previous course is developed into a prototype system. Part II emphasizes the development, assembly, testing and evaluation of the system designed in Part I. Lectures and seminars focus on the prototype development process, design verification and industry practices. A formal report documents the semester's work.
Attributes: Writing Intensive Course
Prerequisite(s): ME 755 with a minimum grade of D-.
Equivalent(s): ME 656
Grade Mode: Letter Grading

ME 772 - Control Systems
Credits: 0 or 4
Development of advanced control system design concepts such as Nyquist analysis, lead-lag compensation, state feedback, parameter sensitivity, controllability, observability, introduction to non-linear and modern control. Includes interactive computer-aided design and real-time digital control. Lab.
Prerequisite(s): ME 747 with a minimum grade of D-.
Equivalent(s): ECE 772, EE 772
Grade Mode: Letter Grading

ME 777 - Computer Aided Engineering
Credits: 4
In this course, modules of Solid Works (beyond its basic solid modeling capabilities) and other software is used to demonstrate how computer based tools can be used in engineering practice, in particular design analysis and optimization. Emphasis placed on using knowledge from past engineering courses to obtain theoretical calculations to compare with the results from the computer software package.
Attributes: Writing Intensive Course
Prerequisite(s): (ME 526 with a minimum grade of D- or CEE 501 with a minimum grade of D-) and ME 627 with a minimum grade of D- and ME 603 with a minimum grade of D- and ME 608 with a minimum grade of D-.
Grade Mode: Letter Grading

ME 786 - Introduction to Finite Element Analysis
Credits: 4
Topics include basic matrix theory, potential energy approach, direct stiffness method, calculus of variations, development of finite element theory, and modeling techniques. Applications in solid mechanics, heat transfer, fluids, and electromagnetic devices, via both commercially available codes and student-written codes. Lab.
Prerequisite(s): ME 526 with a minimum grade of D-.
Equivalent(s): CIE 786
Grade Mode: Letter Grading

ME 795 - Special Topics
Credits: 1-4
New or specialized courses and/or independent study.
Repeat Rule: May be repeated for a maximum of 20 credits.
Grade Mode: Letter Grading

ME 797 - Honors Seminar
Credits: 1
Course enrichment and/or additional independent study in subject matter pertaining to a 600- or 700-level ME course other than ME 695, ME 696, ME 697, or ME 795.
Attributes: Honors course
Repeat Rule: May be repeated for a maximum of 3 credits.
Grade Mode: Letter Grading

Military Science (MILT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MILT 400PT - Physical Training
Credits: 0
This course is intended to fulfill the U.S. Army Cadet Command requirement to conduct organized physical training at the program level.
Grade Mode: Credit/Fail Grading

MILT 401 - Leadership Laboratory I
Credits: 0
Open only to students taking another Military Science class, with different roles offered for students at different levels of the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of various training programs. Students develop, practice and refine leadership skills by serving and being evaluated in a variety of supervisory positions. Specific events include a team-building leader reaction course, orientation to military weapons, basic tactical movement, and land navigation.
Grade Mode: Credit/Fail Grading

MILT 402 - Leadership Laboratory II
Credits: 0
Open only to students taking another Military Science class, with different roles offered for students at different levels of the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of various training programs. Students develop, practice and refine leadership skills by serving and being evaluated in a variety of supervisory positions. Specific events include basic marksmanship, advanced tactical movement, orienteering and land navigation.
Grade Mode: Credit/Fail Grading

MILT 403 - United States Army History
Credits: 2
Develops an understanding of the effects the US military and society have on each other through the establishment and background of the United States Army. Presented in the context of broader US Military history and military strategy and global involvement. Through readings, oral and written presentations, and exams, students describe the role of the US Army, its evolution and its impact on society and technology; and critically analyze an armed conflict using the principles of war. This is a pre-commissioning requirement for professional military education (PME) required by the United States Army Cadet Command. It is open to non-ROTC students.
Repeat Rule: May be repeated for a maximum of 6 credits.
Grade Mode: Letter Grading

MILT 413 - Introduction to ROTC
Credits: 0 or 2
Make your first new peer group at college one committed to performing well and enjoying the experience. Increase self-confidence through team study and activities in physical fitness, rappelling, first aid, basic marksmanship, and basic drill. Learn fundamental concepts of leadership in both classroom and outdoor laboratory environments. One hour and a required leadership lab (MILT 401L) plus optional (mandatory for scholarship cadets) participation in three one-hour sessions of physical fitness per week. Participation in one weekend exercise is also required for all cadets. Open to all college students, no military commitment required.
Grade Mode: Letter Grading

MILT 414 - Introduction to ROTC II
Credits: 2
Learn and apply principles of effective leadership. Reinforce self-confidence through participation in physically and mentally challenging exercises with other ROTC cadets. Continued activities in basic drill, physical fitness, rappelling, first aid, and basic marksmanship. Develop communication skills to improve individual performance and group interaction. One hour and a required leadership lab (MILT 402L) plus optional (mandatory for scholarship cadets) participation in three one-hour sessions for physical fitness per week. Participation in one weekend exercise is also required for all cadets. Open to all college students; no military commitment required.
Grade Mode: Letter Grading

MILT 501 - Self/Team Development I
Credits: 0 or 2
Learn and apply ethics-based leadership skills that develop individual abilities and contribute to the building of effective teams of people. Develop skills in oral presentations, planning of events, advanced first aid, physical fitness, and land navigation. Learn techniques for training others as an aspect of continued leadership development. Two hours and a required leadership lab (MILT 401L), plus optional participation (mandatory for scholarship cadets) in three one-hour sessions of physical fitness per week. Participation in one weekend exercise is required. Additional weekend exercises may be offered for optional participation. Open to all college students, no military commitment required.
Co-requisite: MILT 401
Grade Mode: Letter Grading

MILT 502 - Individual/Team Military Tactics
Credits: 0 or 2
Introduces individual and team aspects of military tactics in small unit operations. Includes use of radio communications, making safety assessments, movement techniques, planning for team safety/security, and methods of pre-execution checks. Practical exercises with other ROTC students. Learn techniques for training others as an aspect of continued leadership development. Two hours and a required leadership lab (MILT 402L), plus optional participation (mandatory for scholarship cadets) in three one-hour sessions of physical fitness per week. Participation in one weekend exercise is required. Additional weekend exercises may be offered for optional participation. Open to all college students, no military commitment required.
Co-requisite: MILT 402
Grade Mode: Letter Grading

MILT 601 - Leading Small Organizations I
Credits: 0 or 4
Series of practical opportunities to lead small groups, receive personal assessments and encouragement, and lead again in situations of increasing complexity. Plan and conduct training for other ROTC students in small unit offensive and defensive operations. Three hours and required leadership lab (MILT 401L) plus required participation in three one-hour sessions of physical fitness per week. Participation in one weekend exercise is also required. Other weekend exercises are offered for optional participation.
Grade Mode: Letter Grading

MILT 602 - Leading Small Organizations II
Credits: 0 or 4
Continues the methodology from MILT 601. Analyze tasks; prepare written and oral guidance for team members to accomplish tasks. Delegate tasks and supervise. Plan for and adapt to the unexpected in organizations under stress. Examine and apply lessons from leadership studies. Examine importance of ethical decision making in setting a positive climate that enhances team performance. Three hours and a required leadership lab (MILT 402L) plus required participation in three one-hour sessions for physical fitness per week. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.
Grade Mode: Letter Grading

MILT 611 - Seminar on Leadership and Management I
Credits: 0 or 4
Plan, conduct and evaluate activities of the ROTC cadet organization. Articulate goals and put plans into action to attain them. Assess organizational cohesion and develop strategies to improve it. Develop confidence in skills to lead people and manage resources. Learn/apply various Army policies and programs in this effort. Three hours and a required leadership lab (MILT 401L) plus required participation in three one-hour sessions for physical fitness per week. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.
Grade Mode: Letter Grading

MILT 612 - Transition to Lieutenant
Credits: 0 or 4
Continues the methodology from MILT 611. Identify and resolve ethical dilemmas. Refine counseling and motivating techniques. Examine aspects of tradition and law as related to leading as an officer in the Army. Prepare for a future as a successful Army lieutenant. Three hours and a required leadership lab (MILT 402L) plus required participation in three one-hour sessions for physical fitness per week. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.
Grade Mode: Letter Grading

MILT 695 - Officer Internship
Credits: 1-4
Experiential learning through fieldwork in a military-type unit. Written analysis required.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Music (MUSI)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MUSI 401 - Introduction to Music
Credits: 4
Fundamental approach to analytical listening with attention to learning how to aurally recognize and apply the basic elements of music to a wide variety of specific musical works in oral and written contexts. Critical thinking and listening skills will be developed through study of music in a variety of cultural and historical perspectives. Some participation in musical life of the University may be required, unless this is the fully online version. This course does not fulfill a music major program requirement nor does it satisfy the Fine and Performing Arts Discovery requirement for any music major program.
Attributes: FinePerformingArts(Discovery)
Equivalent(s): MUSI 401H
Grade Mode: Letter Grading

MUSI 403 - Roots of Rock
Credits: 4
Focuses on the musical styles, traditions, and social circumstances that led to a distinctive form of American popular music in the 1950's and '60's. In addition to developing critical listening skills to discern subtle distinctions among such styles and sub-styles as blues, folk, jazz, and country, the course also considers the diverse social trends that helped drive changes and developments in the various styles and genres covered. While some attention will be devoted to rock music of the mid-late sixties, the course emphasizes the various musical styles that preceded rock.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

MUSI 404 - An Introduction to Music, Media, and the Moving Image
Credits: 4
Through selected readings, attentive listening, viewing, and discussion of a variety of films and multi-media productions, students develop a common vocabulary for analyzing music accompanying moving images. Students develop an understanding of the western and non-western musical conventions that work, often at a subconscious level, in conjunction with images to shape and cue audience responses to, and interaction with, visual cues. Media includes canonic Hollywood films, independent and foreign cinema, with explorations of non-Western films, video game scoring, television, and animation. This course does not fulfill a music major program requirement nor does it satisfy the Fine and Performing Arts Discovery requirement for any music major program.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

MUSI 405 - Survey of Music in America
Credits: 4
From colonial times to the present, including various European influences, the quest for an American style, and the emergence of such indigenous phenomena as jazz. This course does not fulfill a music major program requirement nor does it satisfy the Fine and Performing Arts Discovery requirement for any music major program. (Formerly MUSI 511).
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

MUSI 406 - Country Music
Credits: 4
This course surveys the rich musical, cultural, and economic history of country music in the United States. Since its inception, country music has embodied a tension between tradition and progress. Country music thereby reflects a basic feature of the American story, valorizing our history while valuing social and technological development. Throughout the course, we consider this tension as it affects the musical content and cultural meaning of country music.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

MUSI 441 - Concert Choir
Credits: 0-1
Large, non-auditioned, SATB chorus specializing in the performance of choral art-song, masterworks, and symphonic choral repertoire. Open to all students. Pre-registration is encouraged. This class requires two concerts outside of the normal class meeting times.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 442 - Chamber Singers
Credits: 0-1
Auditioned SATB chorus specializing in unaccompanied choral repertoire. Choral experience and strong skills in musicianship are recommended. Auditions are open to all students and conducted the first week of the semester. Contact the instructor for further information. This class requires a number of concerts outside of the normal class meeting times; a schedule is included in the syllabus.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 444 - Music and Social Change
Credits: 4
The connections between music and social change with a twofold goal: 1) to heighten critical listening skills so as to become more aware of ways in which music can express social attitudes; and 2) to introduce the social, cultural, and political issues surrounding the music being studied. Course work consists of listening to selected repertoires, reading scholarly and popular essays about those repertories, and extensive in-class (and on-line) discussion about issues raised by the listening and reading. This course does not fulfill a music major program requirement nor does it satisfy the Fine and Performing Arts Discovery requirement for any music major program.
Attributes: FinePerformingArts(Discovery); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

MUSI 448 - Vocal Arts Project
Credits: 0-1
This vocal performance course explores and prepares singers for a diverse and inclusive range of vocal repertory including but not limited to opera, music theatre, jazz, folk, country, contemporary commercial music, and original songs.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 450 - Symphony
Credits: 0-1
Presents several concerts during the year of repertoire ranging from the great, standard symphonic literature to large modern works.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 452 - Wind Symphony
Credits: 0-1
Select wind ensemble which performs difficult classical and contemporary literature.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 453 - Symphonic Band
Credits: 0 or 1
Original band music, transcription, marches, etc. For students whose program does not permit music as a major interest, but who are interested in maintaining their playing proficiency and continuing their study of music.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 454 - UNH Marching Band
Credits: 0 or 1
Open to all students; performs during football games. Rehearsals conclude at the end of the football season.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 455 - Collaborative Piano
Credits: 1
Drawing from available student instrumentalists and singers, pianists learn the art of performing in trios, duo sonatas, and two-piano works, and gain experience in Lieder accompaniment.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 456 - String Chamber Music
Credits: 0-1
Groups of instrumentalists gain experience in the performance of literature for the smaller ensemble.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 457 - Wind Chamber Music
Credits: 0-1
Groups of instrumentalists gain experience in the performance of literature for the smaller ensemble.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 459 - Percussion Ensemble
Credits: 0-1
Groups of instrumentalists gain experience in the performance of literature for the smaller ensemble.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 460 - Jazz Band
Credits: 0-1
Two jazz bands perform a wide spectrum of big band literature.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 462 - Pep Band
Credits: 0-1
Rehearsal and performance of a broad range of band music at hockey and basketball games.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 463 - Jazz Combo
Credits: 0-1
Groups of instrumentalists gain experience in the performance of literature for the smaller jazz ensemble.
Repeat Rule: May be repeated for a maximum of 9 credits.
Grade Mode: Letter Grading

MUSI 464 - Guitar Ensemble
Credits: 0-1
Groups of instrumentalists gain experience in the performance of literature for the smaller ensemble.
Repeat Rule: May be repeated for a maximum of 9 credits.
Grade Mode: Letter Grading

MUSI 471 - Theory I
Credits: 3
Introduces the tonal system; species counterpoint; principles of voice leading and harmonic progression through the analysis, realization, and composition of one-, two-,and four-voiced textures. Concept of triad inversion and consonant diatonic harmonies of the major and minor modes. Students should register for MUSI 473 and MUSI 474 concurrently.
Grade Mode: Letter Grading

MUSI 472 - Theory I
Credits: 3
Introduces the tonal system; species counterpoint; principles of voice leading and harmonic progression through the analysis, realization, and composition of one-, two-,and four-voiced textures. Concept of triad inversion and consonant diatonic harmonies of the major and minor modes. Students should register for MUSI 474 and MUSI 476 concurrently.
Prerequisite(s): MUSI 471 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 473 - Ear Training I
Credits: 1
Laboratory exercises to develop aural skills; sight-singing and dictation. Students should register for MUSI 471 and MUSI 472 concurrently.
Grade Mode: Letter Grading

MUSI 474 - Ear Training I
Credits: 1
Laboratory exercises to develop aural skills; sight-singing and dictation. Students should register for MUSI 472 and MUSI 476 concurrently.
Prerequisite(s): MUSI 473 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 475 - Functional Piano I
Credits: 1
Basic instruction for music majors with no previous keyboard training. Piano technique, keyboard harmony geared to the practical harmonization of simple melodies, sight reading, transposition, and modulation. May involve both class instruction and periodic short individual lessons.
Co-requisite: MUSI 471, MUSI 473
Grade Mode: Letter Grading

MUSI 476 - Functional Piano I
Credits: 1
Basic instruction for music majors with no previous keyboard training. Piano technique, keyboard harmony geared to the practical harmonization of simple melodies, sight reading, transposition, and modulation. May involve both class instruction and periodic short individual lessons.
Co-requisite: MUSI 472, MUSI 474
Prerequisite(s): MUSI 475 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 501 - The Western Musical Canon
Credits: 3
An introductory survey of the Western "classical" canon. Students will become familiar with the different style periods of church, court, and concert music from the ninth century to the present day. Some score reading involved; rudimentary knowledge of music theory encouraged.
Prerequisite(s): (MUSI 472 with a minimum grade of D- or MUSI 412 with a minimum grade of D-).
Grade Mode: Letter Grading

MUSI 502 - Musics in Context
Credits: 3
Through a series of case studies drawn from a variety of global musics past and present, including classical, traditional, and commercial, this course introduces students to different approaches to thinking about and analyzing music in conjunction with the specific case studies and in individual and small group projects. This approach equips students to investigate music that they perform, teach, and listen to - within or beyond the UNH curriculum - drawing on different branches of music study to place any type of music in historical, cultural, and social contexts and to share their findings in written, oral, or recorded formats. A core course for music majors, this course builds on concepts and repertories encountered in MUSI 501, MUSI 515 MUSI 471–476, 571–576 and prepares students for their 700- level courses in music history and theory.
Attributes: Inquiry (Discovery)
Prerequisite(s): MUSI 471 with a minimum grade of C- and MUSI 472 with a minimum grade of C- and MUSI 501 with a minimum grade of C- and MUSI 515 with a minimum grade of C-.
Grade Mode: Letter Grading

MUSI 515 - Music in World Cultures
Credits: 4
An introduction to musicking (participating in any way, including listening, in musical performance) beyond the Western tradition, this course offers students an opportunity to explore the music and culture of diverse regions from an ethnomusicological perspective. Through listening to and analyzing music, readings, lecture, discussion, and individual fieldwork projects, students discover how music functions within different world cultures and gain understanding of the ways people "make music meaningful and useful in their lives," as, through musicking, they articulate, resist, and transform cultural norms.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

MUSI 520 - Diction for Singers I
Credits: 2
Application of International Phonetic Alphabet (IPA) to English, French, German, and Italian. Emphasizes both written and spoken performance.
Grade Mode: Letter Grading

MUSI 540 - Recital Attendance
Credits: 0
This course is a requirement for all undergraduate music majors in the Department of Music. Students are required to attend at least twelve approved recitals or concerts during each semester they are enrolled in MUSI 540. This course must be completed six times with a grade of Credit (Satisfactory) for zero credit each time.
Grade Mode: Credit/Fail Grading

MUSI 541 - Piano
Credits: 1-4
Private instruction in piano. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 545 - Voice
Credits: 1-4
Private instruction in voice. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 546 - Violin
Credits: 1-4
Private instruction in violin. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 547 - Viola
Credits: 1-4
Private instruction in viola. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 548 - Violoncello
Credits: 1-4
Private instruction in violoncello. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 549 - String Bass
Credits: 1-4
Private instruction in string bass. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 551 - Flute
Credits: 1-4
Private instruction in flute. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 552 - Clarinet
Credits: 1-4
Private instruction in clarinet. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 553 - Saxophone
Credits: 1-4
Private instruction in saxophone. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 554 - Oboe
Credits: 1-4
Private instruction in oboe. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 555 - Bassoon
Credits: 1-4
Private instruction in bassoon. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 556 - French Horn
Credits: 1-4
Private instruction in French horn. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 557 - Trumpet
Credits: 1-4
Private instruction in trumpet. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 558 - Trombone
Credits: 1-4
Private instruction in trombone. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 559 - Euphonium
Credits: 1-4
Private instruction in euphonium. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 560 - Tuba
Credits: 1-4
Private instruction in tuba. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 561 - Percussion
Credits: 1-4
Private instruction in percussion. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 562 - Jazz Piano
Credits: 1-4
Private instruction in jazz piano. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 563 - Jazz Guitar
Credits: 1-4
Private instruction in jazz guitar. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 564 - Drum Set
Credits: 1-4
Private instruction in drum set. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 571 - Theory II
Credits: 3
Continuation of MUSI 471- MUSI 472. Compositional and analytical work stresses the treatment of dissonance within the tonal system; accessory tones, seventh chords, tonicization, modulation, basic principles of chromatic harmony, and harmonization of chorale melodies are covered. Students should register for MUSI 573 and MUSI 574 concurrently.
Prerequisite(s): MUSI 472 with a minimum grade of D- and MUSI 474 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 572 - Theory II
Credits: 3
Continuation of MUSI 471- MUSI 472. Compositional and analytical work stresses the treatment of dissonance within the tonal system; accessory tones, seventh chords, tonicization, modulation, basic principles of chromatic harmony, and harmonization of chorale melodies are covered. Students should register for MUSI 573 and MUSI 574 concurrently.
Prerequisite(s): MUSI 472 with a minimum grade of D- and MUSI 474 with a minimum grade of D- and MUSI 571 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 573 - Ear Training II
Credits: 1
Laboratory exercises to develop aural skills further. Students should register for MUSI 571-572 concurrently.
Prerequisite(s): MUSI 472 with a minimum grade of D- and MUSI 474 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 574 - Ear Training II
Credits: 1
Laboratory exercises to develop aural skills further. Students should register for MUSI 571-572 concurrently.
Prerequisite(s): MUSI 472 with a minimum grade of D- and MUSI 474 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 575 - Functional Piano II
Credits: 1
Basic instruction for music majors with no previous keyboard training. Piano technique, keyboard harmony geared to the practical harmonization of simple melodies, sight reading, transposition, and modulation. May involve both class instruction and periodic short individual lessons.
Co-requisite: MUSI 571, MUSI 573
Prerequisite(s): MUSI 476 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 576 - Functional Piano II
Credits: 1
Basic instruction for music majors with no previous keyboard training. Piano technique, keyboard harmony geared to the practical harmonization of simple melodies, sight reading, transposition, and modulation. May involve both class instruction and periodic short individual lessons.
Co-requisite: MUSI 572, MUSI 574
Prerequisite(s): MUSI 575 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 595 - Special Topics in Music Literature
Credits: 0-4
Open to music majors and non-majors; topics in areas not easily covered in historical courses. May be repeated for credit.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

MUSI 691 - Music Internship I
Credits: 1-2
Music students will expand their professional experience in an educationally productive and effective manner while building community relationships. With the guidance of a UNH music internship coordinator and community partner supervisor, the student is expected to contribute effectively within the organization. Music Internship I is required of all music majors in their junior year.
Repeat Rule: May be repeated for a maximum of 2 credits.
Grade Mode: Credit/Fail Grading

MUSI 701 - Topics in Music History
Credits: 3
Courses offered under this number feature a variety of topics having to do with music history. Topics in given semesters reflet faculty expertise in teaching and research. For topic examples, see "Courses Taught" on relevant faculty web pages. May be repeated barring duplication of subject.
Attributes: Writing Intensive Course
Prerequisite(s): MUSI 501 with a minimum grade of C- and MUSI 502 with a minimum grade of C-.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

MUSI 709W - Music of the Romantic Period
Credits: 3
A survey of romanticism in music from Beethoven's late period to the end of the 19th century. The works of Schubert, Berlioz, Schumann, Mendelssohn, Chopin, Wagner, Verdi, Brahms, Austrian symphonists, French pre-impressionists, and national styles in European music.
Attributes: Writing Intensive Course
Prerequisite(s): MUSI 501 with a minimum grade of D- and MUSI 502 with a minimum grade of D-.
Equivalent(s): MUSI 709
Grade Mode: Letter Grading

MUSI 711 - Music of the 20th and 21st Centuries
Credits: 3
Styles and techniques of composers from Debussy to the present. Special emphasis on tonal music before World War I, neoclassical trends, the emergence of atonality and serial techniques, electronic music.
Attributes: Writing Intensive Course
Prerequisite(s): MUSI 501 with a minimum grade of D- and MUSI 502 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 731 - Conducting
Credits: 2
Physical aspects, equipment of conductor, fundamental gestures and beats, baton techniques. Reading and analysis of full and condensed scores, study of transposition, psychology of rehearsal.
Prerequisite(s): MUSI 571 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 732 - Conducting
Credits: 2
Physical aspects, equipment of conductor, fundamental gestures and beats, baton techniques. Reading and analysis of full and condensed scores, study of transposition, psychology of rehearsal.
Prerequisite(s): MUSI 571 with a minimum grade of D- and MUSI 731 with a minimum grade of D-.
Grade Mode: Letter Grading

MUSI 741 - Piano
Credits: 1-4
Private instruction in piano. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 745 - Voice
Credits: 1-4
Private instruction in voice. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 746 - Violin
Credits: 1-4
Private instruction in violin. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 747 - Viola
Credits: 1-4
Private instruction in viola. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 748 - Violoncello
Credits: 1-4
Private instruction in violoncello. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 749 - String Bass
Credits: 1-4
Private instruction in string bass. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 750 - Classical Guitar
Credits: 1-4
Private instruction in classical guitar.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading

MUSI 751 - Flute
Credits: 1-4
Private instruction in flute. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 752 - Clarinet
Credits: 1-4
Private instruction in clarinet. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 753 - Saxophone
Credits: 1-4
Private instruction in saxophone. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 754 - Oboe
Credits: 1-4
Private instruction in oboe. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 755 - Bassoon
Credits: 1-4
Private instruction in bassoon. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 756 - French Horn
Credits: 1-4
Private instruction in French horn. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 757 - Trumpet
Credits: 1-4
Private instruction in trumpet. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 758 - Trombone
Credits: 1-4
Private instruction in trombone. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 759 - Euphonium
Credits: 1-4
Private instruction in euphonium. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 760 - Tuba
Credits: 1-4
Private instruction in tuba. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 761 - Percussion
Credits: 1-4
Private instruction in percussion. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 762 - Jazz Piano
Credits: 1-4
Private instruction in jazz piano. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 763 - Jazz Guitar
Credits: 1-4
Private instruction in jazz guitar. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 764 - Drum Set
Credits: 1-4
Private instruction in drum set. Special fee for non-majors.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 775 - Composition
Credits: 1-4
Studies in composition and score preparation resulting in the creation of original compositions to be performed on a student composers' concert in the Music Department.
Prerequisite(s): MUSI 572 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MUSI 776 - Composition
Credits: 1-4
Studies in composition and score preparation resulting in the creation of original compositions to be performed on a student composers' concert in the Music Department.
Prerequisite(s): MUSI 572 with a minimum grade of D- and MUSI 775 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

MUSI 777 - Advanced Composition
Credits: 1-4
Continuation of MUSI 776. Individual compositional projects. May be repeated for credit.
Prerequisite(s): MUSI 776 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 99 credits.
Grade Mode: Letter Grading

MUSI 779 - Reading and Writing Musical Scores
Credits: 3
This course is designed to assist music majors gain competence and confidence in working with full scores from music ensembles. Course activities will focus on the tasks of score reading and analysis, and the creation of new arrangements for ensembles the student is likely to lead in their professional life. Additionally, various aspects of programming repertoire for performances will be addressed. These skills will be of value to both music education and music performance majors.
Prerequisite(s): MUSI 471 with a minimum grade of C- and MUSI 472 with a minimum grade of C- and MUSI 571 with a minimum grade of C- and MUSI 572 with a minimum grade of C-.
Grade Mode: Letter Grading

MUSI 781W - Analysis: Form and Structure
Credits: 3
Introduces analytical techniques through the study of representative masterworks: formal and structural elements and their interrelationships. Analysis of 18th- and 19th century works.
Attributes: Writing Intensive Course
Prerequisite(s): MUSI 572 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

MUSI 791 - Music Internship II
Credits: 2-4
Music students will expand their professional experience in an educationally productive and effective manner while building community relationships. With the guidance of a UNH music internship coordinator and community partner supervisor, the student is expected to contribute effectively within the organization. Music Internship II is required of all music majors (apart rom music education majors) in their senior year.
Prerequisite(s): MUSI 691 with a minimum grade of CR.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

MUSI 795 - Special Studies
Credits: 1-4
A) J.S. Bach, B) Franz Schubert, C) Debussy and Ravel, D) the world of jazz, E) piano literature, F) 19th century French music, G) advanced analysis, H) advanced study in electronic music, I) composition through computer-generated sound, J) woodwind literature, K) brass literature, L) string literature, M) medieval performance practice, N) renaissance performance practice, O) baroque performance practice, P) classical performance practice, Q) 19th century performance practice, R) 20th century performance practice, S) woodwind repair, T) string repair, U) advanced jazz improvisation, V) advanced piano pedagogy, W) advanced accompanying, X) advanced conducting, Y) independent study. May be repeated for credit with permission.
Repeat Rule: May be repeated up to 4 times.
Equivalent(s): MUSI 795W
Grade Mode: Letter Grading

Music Education (MUED)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

MUED 741 - Techniques and Methods in Choral Music
Credits: 2
Methods for teaching choral music in 5-12th grade schools, the developing voice, vocal modeling, repertoire selection, choral conducting, rehearsal technique, sequencing and feedback, piano skills for choral rehearsal, in-school fieldwork. This class requires a fieldwork component. Students will conduct rehearsals at Oyster River Middle School 7:00am-7:50am at least once per week for a portion of the semester.
Prerequisite(s): EDUC 500 with a minimum grade of D- and MUSI 731 with a minimum grade of D- and MUSI 732 with a minimum grade of D-.
Grade Mode: Letter Grading

MUED 745 - Techniques and Methods in String Instruments
Credits: 2
Class and individual instruction. Intensive training on the violin, viola, cello, and double bass. Classroom procedures, establishment of string programs, and evaluation of available methods materials.
Grade Mode: Letter Grading

MUED 747 - Techniques and Methods in Woodwind Instruments
Credits: 2 or 3
Basic course in embouchure formation, tone production, tonguing, fingering and instrument care as applied to each of the woodwinds: flute, oboe, clarinet, bassoon and saxophone. Methods, studies, solos and ensembles most useful with school players of woodwind instruments.
Grade Mode: Letter Grading

MUED 749 - Techniques and Methods in Brass Instruments
Credits: 2
Basic course in embouchure formation, tone, tonguing, fingering, flexibility, accuracy, and range development as applied to the trumpet or baritone horn, French horn, and trombone. Methods, studies, solos, and ensembles most likely to be useful with school players of brass instruments.
Grade Mode: Letter Grading

MUED 751 - Techniques and Methods in Percussion Instruments
Credits: 2
Basic performance skills on snare drum, timpani, mallet instruments, and other percussion instruments used in bands and orchestras. Materials and methods of instruction.
Grade Mode: Letter Grading

MUED 755 - Vocal Pedagogy
Credits: 2
A study of vocal anatomy, vocal function, and teaching methods, with an emphasis on application for singers and voice teachers.
Grade Mode: Letter Grading

MUED 765 - Instrumental Music Methods
Credits: 2
Organization and delivery of instruction to groups of instrumental music students. Examination of appropriate curricula and materials, application of instrumental and conducting techniques, structure of rehearsals, assessment of student progress.
Grade Mode: Letter Grading

MUED 790 - Teaching Elementary School Music
Credits: 3
Experiential approach toward learning creative strategies for teaching elementary school music. Includes various curricula and methods; philosophy and psychology of music; demonstration of materials and instruments. Observation and teaching in schools. Piano proficiency recommended.
Grade Mode: Letter Grading

MUED 791 - Teaching Secondary School Music
Credits: 2
Assembling, managing, and teaching junior/senior high school music curriculum. Academic issues of philosophy, curriculum building, application of learning theories, administration, evaluation, motivation, and classroom management combined with field experience in lesson planning and teaching/rehearsal techniques.
Prerequisite(s): MUSI 731 with a minimum grade of D- and MUSI 732 with a minimum grade of D-.
Grade Mode: Letter Grading

MUED 795 - Special Studies
Credits: 1-4
Allows upper-level students to explore individually or in groups areas related to their specific professional interests.
Grade Mode: Letter Grading

National Security Intelligence Analysis (NSIA)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

No courses are currently active in the course inventory for this subject prefix.

Native American Indigenous Studies (NAIS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

NAIS 400 - Introduction to Native American and Indigenous Studies
Credits: 4
This course serves as an introduction to the interdisciplinary field of Native American and Indigenous Studies (NAIS). NAIS cultivates a broad understanding of the history, lands, culture, literature, language and artistic expression, science and technology, race and identity, and social organization and political statuses of Indigenous peoples, emphasizing self-determination, sovereignty, and survivance globally. Students will learn about significant events and issues from Indigenous perspectives and develop new ways of thinking about Native peoples.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

Natural Resources (NR)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

NR 400 - Professional Perspectives in Natural Resources
Credits: 1
Lectures by departmental faculty provide an informal look at the various natural resource disciplines and professions represented by the Department of Natural Resources. These presentations acquaint students with our faculty and inform them of some of the exciting research being undertaken in the department. Students also learn of opportunities for professional involvement. Required for all first-semester Natural Resources majors.
Grade Mode: Credit/Fail Grading

NR 403 - Introduction to Environmental Science
Credits: 4
A multi-disciplinary introduction to Environmental Sciences, presenting basic concepts and controversies in geology, meteorology/hydrology, global biology and biogeochemistry, integrated through the study of the Earth as system. Intended primarily for declared or perspective majors in Environmental Sciences and related programs. Combines lecture and discussion with discovery and presentation experiences to address the history of ideas, and major questions and controversies, both settled and active.
Attributes: Inquiry (Discovery)
Grade Mode: Letter Grading

NR 411 - Environmental and Resource Economics Perspectives
Credits: 4
Microeconomic theory and analysis in resource management and use decisions. Survey of significant resource problems from an economic perspective and the application of economic analysis.
Attributes: Social Science (Discovery)
Equivalent(s): ECN 412, ECN 412W, ECON 402, ECON 402A, ECON 402H, EREC 411
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading

NR 415 - Natural Resources Field Methods
Credits: 2
This course is intended to serve first or second year students in Forestry, Wildlife and Conservation Biology, and Environmental Conservation and Sustainability. After taking this course, students are able to navigate successfully in wild terrain using pacing, map, compass, GPS; can conduct a simple planar survey including cartography; and can sample a forest in order to characterize the abundance and quality of forest resources. Moreover, students know the fundamental principles of navigation, surveying, and field sampling.
Grade Mode: Letter Grading

NR 417 - Sophomore Seminar: Wildlife and Conservation Biology
Credits: 2
This course provides a professional foundation and orientation for second-year Wildlife & Conservation Biology (WCB) students. Through readings, seminars, guest speakers, and conservation, students will explore the range of what it means to be a professional Wildlife & Conservation Biologist. After taking this course, students will be better able to navigate and critique the scientific literature, synthesize and communicate information, and understand and articulate the diverse field of Wildlife & Conservation Biology.
Grade Mode: Letter Grading

NR 425 - Field Dendrology
Credits: 4
Students study forest trees in natural communities and urban settings. Identification and nomenclature of important North American trees and shrubs is emphasized. Environmental factors influencing tree growth, combined with study of disturbance history, provide the context for understanding why tree species grow where they do. Students are introduced to the major forest regions of North America. Restricted to NR majors; others by permission.
Equivalent(s): EC 410, FOR 425, NR 420
Grade Mode: Letter Grading

NR 433 - Wildlife Ecology
Credits: 4
Historical, biological, ecological, and sociological factors influencing the wildlife resource and its management. Concepts in populations, communities, habitat, and contemporary wildlife issues. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course
Grade Mode: Letter Grading
Special Fee: Yes

NR 435 - Contemporary Conservation Issues and Environmental Awareness
Credits: 4
Explores the impacts of technology and human activity on our environment and natural resources. Key conservation issues are used as examples of past and present biological, social, and environmental conflicts.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): NR 435H
Grade Mode: Letter Grading

NR 435H - Honors/Contemporary Conservation Issues and Environmental Awareness
Credits: 4
Explores the impacts of technology and human activity on our environment and natural resources. Key conservation issues are used as examples of past and present biological, social, and environmental conflicts.
Attributes: Environment,TechSociety(Disc); Honors course
Equivalent(s): NR 435
Grade Mode: Letter Grading

NR 437 - Principles of Sustainability
Credits: 4
In this course, we investigate the foundational principles of the concept of sustainability. Our objectives include: understanding the many integrated dimensions of sustainability; examining illustrations of unsustainable human-environment relations; recognizing the complexity of sustainability problems and the challenges to finding solutions; comprehending that human-environment relations are a multi-level, complex and dynamic system, and appreciating that the sustainability of ecosystems is necessarily embedded in social, cultural and historical trends.
Equivalent(s): SUST 401, SUST 401H
Grade Mode: Letter Grading

NR 439 - Environmental Biology
Credits: 4
Environmental biology focuses on the origins, functions, and interactions of populations, communities, species and ecosystems in relation to dynamic environmental processes. The main course objective is to provide a basic understanding of ecosystem function and the ecological, evolutionary, and genetic principles necessary to understand biological diversity and its distribution.
Grade Mode: Letter Grading

NR 444 - The New Pirates of the Caribbean
Credits: 4
Inquiry into many facets of tourism from the standpoint of tourists and tour destination. Economic and institutional factors affecting human well-being from the use of land and water resources; discussions of distributional aspects of benefits from tourism activities.; environmental impacts; ownership patterns and uses; cultural attributes; and local economies in small Caribbean island nations. Cruise ships, time-shares, all-inclusive resorts, hurricanes, casinos, bars, rum, sex, and drugs are investigated through extensive readings and web surfing.
Attributes: World Cultures(Discovery); Inquiry (Discovery); Writing Intensive Course
Equivalent(s): EREC 444
Grade Mode: Letter Grading

NR 501 - Studio Soils
Credits: 4
An overview of physical, chemical, and biological properties of soil. Sub-disciplines of soil chemistry, soil physics, soil microbiology, soil genesis, and classification. Lab.
Attributes: Writing Intensive Course
Equivalent(s): SOIL 501
Grade Mode: Letter Grading
Special Fee: Yes

NR 504 - Freshwater Resources
Credits: 4
Major determinants of freshwater resources including hydrologic cycle and water balance, precipitation, stream-flow measurement, pollution, water supply and sewage treatment, water resource management and regulation. Lab/field trips.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

NR 506 - Forest Entomology
Credits: 4
Insects are among the most diverse and abundant organisms on the planet and play a crucial role in forest ecosystems. Insects from the base of the consumer food web in forests and are key drivers of nutrient cycling, pollination, etc. This course surveys common and important insect orders, families, and species found in forest systems and provides the tools for basic identification and biological study of these fascinating creatures.
Equivalent(s): FOR 506
Grade Mode: Letter Grading
Special Fee: Yes

NR 507 - Introduction to our Energy System and Sustainable Energy
Credits: 4
This course introduces students to our domestic energy system and the expanding efforts to develop our use and acceptance of sustainable energy. It provides a historical context of our system that explains where we are today in terms of the grid, technologies, energy use and production and energy markets, primarily for electricity and building use. The course examines how our current impedes and enhances opportunities for innovation in renewable technologies and financing.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

NR 508 - Communicating Science
Credits: 4
Effective communication and community engagement with science are critical, particularly in our modern era of information overwhelm. In this course, we actively explore tools and techniques for oral, written, and visual communication of science in various mediums and with a range of publics and motivations. With an emphasis on critical and creative thinking, we will cultivate a set of skills and best practices as students develop a personal philosophy for communicating science with diverse audiences.
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401H with a minimum grade of D-.
Grade Mode: Letter Grading

NR 527 - Forest Ecology
Credits: 4
Introduces basic and applied ecology of forests, with emphasis on ecosystem processes, including water, energy, and nutrient cycles; biological interactions, including biodiversity and plant-plant, plant-animal, and plant-microbe relationships; and human impacts, including forest management, land-use/land cover-change, and changes in atmospheric chemistry. Lab.
Equivalent(s): FORT 527
Grade Mode: Letter Grading

NR 561 - Chemistry of the Environment
Credits: 4
The course is designed for students who desire a deeper understanding of chemical principles in environmental- and ecology-related disciplines. This course will focus on understanding key principles that underline many of the important chemical processes that influence the functioning and health of environmental systems. These include reaction rates, oxidation-reduction, kinetics and enzyme dynamics, pH and acid-base equilibria, organic transformations, colloids and particulate behavior, and analytical approaches to understanding environmental chemistry.
Prerequisite(s): CHEM 403 with a minimum grade of D- or CHEM 405 with a minimum grade of D- or CHEM 411 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

NR 564 - Urban Forestry and Arboriculture
Credits: 4
This course offers a comprehensive understanding of urban forested landscapes & arboricultural practices to maintain their health & function. In this course, we will explore the ecological benefits of urban trees, learn practical skills in tree care, & evaluate the socio-economic impacts of urban forests in communities. Tangible skills covered include tree climbing & pruning for tree maintenance, safety procedures in the industry, hazard tree assessment, & proper tree planting techniques.
Prerequisite(s): NR 527 with a minimum grade of D-.
Equivalent(s): FORT 564
Grade Mode: Letter Grading

NR 572 - Introduction to Natural Resource Economics
Credits: 4
Introduces theory, methods of analysis, and current literature of natural resource economics and policy. Topics include multiple use, taxation, optimal harvest scheduling, market failure, property rights, public goods, benefit-cost analysis, amenity values, non-market resource services and natural resource policy. Topics applied to forests and forestry, wildlife management, outdoor recreation, public lands, agriculture, fisheries, water, energy and mining/nonrenewable resources.
Equivalent(s): EREC 572
Grade Mode: Letter Grading

NR 575 - Forest Operations
Credits: 2
A study of harvesting methods and their relation to forest management and silviculture of the state and region. Theory and practice of conventional harvesting systems with strong emphasis on hands-on application of technique and protecting the environment and the safety and health of workers.
Grade Mode: Letter Grading

NR 576 - Forest Products
Credits: 2
The course will cover the structure and properties of wood as a raw material as well as conversion of logs to lumber at the UNH Thompson School sawmill. Lumber and log grading and measurement along with studies in processing efficiency, lumber drying, and physical plant operations will also be covered. There will be an introduction to paper making, veneering, chipping, and marketing of forest products. The course will also cover other non-timber forest products with an emphasis on maple syrup. Sugarbush management, sap extraction and collection, production and finishing of maple products will be covered.
Equivalent(s): FORT 576
Grade Mode: Letter Grading
Special Fee: Yes

NR 579 - Wildland Fire Ecology and Management
Credits: 4
An exploration of the historical context of wildland fire and how our changing climate and past management practices influence future fire regimes at local and national scales. This course will provide instruction in fire ecology, and prescribed fire theory and methods. Students will learn the basic knowledge of forest fire control and use and will focus on firefighting, the impacts of fire on vegetation, and the use of prescribed fire in forest and wildlife management.
Equivalent(s): FORT 479, FORT 579
Grade Mode: Letter Grading
Special Fee: Yes

NR 600 - Work Experience
Credits: 0
As part of their degree program, students are expected to engage in a work experience or internship under professional supervision and approved by natural resources faculty. This experience may occur at any time during their sophomore through senior years. Students are responsible for arranging their own experience in consultation with their advisor and NREN faculty members.
Equivalent(s): NR 599
Grade Mode: Credit/Fail Grading

NR 602 - Natural Resources and Environmental Policy
Credits: 4
Contemporary natural resource and environmental policy problems/issues are addressed from a policy sciences perspective with emphasis on domestic policy solutions. Critical assessment of major policy initiatives and their implementation toward sustainable resource use and a healthy environment. Public policies are analyzed to determine the extent to which their implementation strategies have succeeded, and to assess their adequacy within a bioregional or ecosystem approach, and/or capacity to integrate economic and environmental decisions. Cases include national and local policies in their global context. Students apply public policy analysis and decision tools in laboratory sessions.
Attributes: Writing Intensive Course
Equivalent(s): EC 702
Grade Mode: Letter Grading
Special Fee: Yes

NR 606 - International Energy Topics
Credits: 4
This course introduces students to international energy topics. Students will be exposed to a historical context and current status of several energy-related issues from an international perspective. Topics range from energy poverty, energy and climate change and global fossil fuel subsidies. Studies of specific technologies will be delivered through the context of international leaders, Iceland and geothermal, the UK and offshore wind and solar in Germany.
Grade Mode: Letter Grading

NR 608 - Economics of Sustainability
Credits: 4
The concept of sustainability stands on 3 pillars: Ecology, Economy, & Equity. From the standpoint of the economy in general and social equity, there are specific economic tools that help project leaders and policy advocates perform sustainability evaluations. This course equips students with powerful economic tools they can use for such evaluations. These include Benefit-Cost Analysis, Life-Cycle Cost Analysis, and Regional Economic Impact Analysis. Students will use real data to perform evaluations.
Prerequisite(s): EREC 411 with a minimum grade of D- or NR 411 with a minimum grade of D- or EREC 572 with a minimum grade of D- or NR 572 with a minimum grade of D- or ECON 402 with a minimum grade of D-.
Grade Mode: Letter Grading

NR 615 - Wildlife Habitats
Credits: 4
Introduces animal-habitat associations, including an examination of spatial and temporal features of wildlife habitat, the evolution of habitat selection, and how habitat suitability/productivity is evaluated.
Attributes: Writing Intensive Course
Prerequisite(s): BIOL 541 with a minimum grade of D- or BIOL 541W with a minimum grade of D- or NR 527 with a minimum grade of D-.
Equivalent(s): WILD 615
Grade Mode: Letter Grading
Special Fee: Yes

NR 640 - Wildlife Population Ecology
Credits: 4
An overview of the mechanisms that influence the characteristics of terrestrial wildlife populations. Lecture covers concepts and theory, with a central focus on population growth, how it is influenced by demographic rates of survival, recruitment, immigration/emigration, with additional consideration given to predation and competition, and how population status is monitored for wildlife, including occupancy, abundance, and viability. Lab provides hands-on exercises, often using computer software, with analysis and interpretation of data from local case studies.
Prerequisite(s): (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-) and (BIOL 541 with a minimum grade of D- or BIOL 541W with a minimum grade of D- or NR 527 with a minimum grade of D-) and (MATH 424B with a minimum grade of D- or MATH 420 with a minimum grade of D-).
Grade Mode: Letter Grading

NR 641 - Wildlife Disease Ecology
Credits: 4
This lecture and discussion-based course will provide an overview of the importance of wildlife diseases in the context of their emergence, One Health implications, and disease management using an ecological approach. In addition, the epidemiological, and evolutionary principles of diseases will be considered, as well as how to perform wildlife disease investigations. Diseases will be discussed for each of the major terrestrial and aquatic groups of animals. Guest lectures will be provided by experts in their fields.
Prerequisite(s): (NR 439 with a minimum grade of D- or BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading

NR 642 - Introduction to Biogeography
Credits: 4
Biogeography is an integrative field of inquiry that unites concepts and information from evolutionary biology, ecology, systematics, geology, and physical geography. Students are introduced to the distribution patterns of wild animals and plants and to the factors that determine these patterns. In this course, the emphasis is on evolutionary aspects of biogeography, biodiversity, and implications for conservation issues.
Prerequisite(s): BIOL 541 with a minimum grade of D- or BIOL 541W with a minimum grade of D- or NR 527 with a minimum grade of D-.
Grade Mode: Letter Grading

NR 643 - Economics of Forestry
Credits: 4
Intermediate-level analysis of supply and demand for forest-based goods and services, managerial economics, taxation, capital investments.
Prerequisite(s): EREC 411 with a minimum grade of D- or ECON 402 with a minimum grade of D- or NR 411 with a minimum grade of D-.
Equivalent(s): FOR 643
Grade Mode: Letter Grading

NR 650 - Principles of Conservation Biology
Credits: 4
Examines the major issues relevant to conservation of biodiversity from the genetic to the ecosystem level. In addition to addressing ecological and biological principles, the interdisciplinary nature and challenges of managing for conservation biology, including the role of economic and social factors are examined.
Equivalent(s): EC 502
Grade Mode: Letter Grading
Special Fee: Yes

NR 658 - Introduction to Geographic Information Systems
Credits: 4
Introduces the use of geographic information systems (GIS) for natural resources and related fields. Data models/structures, map projections, data input/output/storage, data analysis/modeling, interpolation, and data quality/standards. Hands-on lab using ArcGIS Pro software.
Grade Mode: Letter Grading

NR 660 - Ecology and Biogeography of New Zealand
Credits: 5
Covers the principles of ecology and biogeography, with a distinct focus on New Zealand. Students investigate the processes that have shaped the New Zealand landmass and its biota. Impact of human settlement on New Zealand's ecosystems is explored in-depth. Methods and techniques of scientific research are incorporated in this course. Field exercises focus on topical case studies in a variety of ecosystems and are designed to strengthen students' conceptual knowledge, enable students to apply this knowledge, as well as develop field skills including classification systems, mapping, habitat assessment, field identification, and sampling techniques.
Co-requisite: INCO 588, NR 661, NR 662, NR 663
Equivalent(s): EC 660
Grade Mode: Letter Grading
Special Fee: Yes

NR 661 - Restoration Ecology and Ecosystem Management in New Zealand
Credits: 4
Current restoration projects and strategies for management of natural resources in New Zealand form the framework for this course. Solving problems related to introduced species, changes in habitat, the preservation of ecological processes and watershed management are the major foci of this course. Management of resources for multiple uses, as well as primary and extractive industries is included. Field exercises focus on topical case studies in a variety of terrestrial and coastal-marine ecosystems and include the identification of habitats and communities, stresses on the environment, and risk analysis.
Co-requisite: NR 660, NR 662, NR 663
Equivalent(s): EC 661
Grade Mode: Letter Grading
Special Fee: Yes

NR 662 - Environmental Policy, Planning and Sustainability in New Zealand
Credits: 3
Introduces students to politics in New Zealand. Investigating policy pathways and planning forms part of the curriculum. Students assess scope of legislation, including the Resource Management Act (1991), for the economic and socio-political environment in New Zealand. Government obligations to the Treaty of Waitangi, and customary uses of resources are included as part of this course. Students are exposed to diverse perspectives of local authority planners and policy makers, local iwi (tribes), the Department of Conservation, and community groups. Students examine case studies involving the resource consent process at several levels of decision-making. Case studies provide a comprehensive overview of the interactions between the environment and people and their cultural and socio-economic needs.
Co-requisite: NR 660, NR 661, NR 663
Equivalent(s): EC 662
Grade Mode: Letter Grading
Special Fee: Yes

NR 663 - Applied Directed Research in New Zealand
Credits: 4
Working closely with faculty, student teams investigate selected ecological, resource management or policy issues. All projects have scientific and societal relevance, and contribute to ongoing/existing projects in the region. Students use the scientific method to design and carry out their projects. Development of rigorous field investigations, experimental design, data analysis, and scientific writing are emphasized. Students prepare a research report and present their findings in a seminar that includes stakeholders and people from the local community.
Co-requisite: NR 660, NR 661, NR 662
Attributes: Writing Intensive Course
Equivalent(s): EC 663
Grade Mode: Letter Grading
Special Fee: Yes

NR 664 - Conservation Genetics and Applied Evolution
Credits: 4
This course provides an overview of key concepts of conservation genetics and the use of genetic tools and data to address them. It addresses how evolutionary theory underpins processes and solutions relevant to biodiversity conservation. Major topics include genetic diversity and variation in natural populations, inbreeding, captive management, genetic rescue), genetic monitoring, and evolutionary responses to anthropogenic impacts. Practical exercises and case studies explore the application of genetic techniques and the analysis of genetic data.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D- or NR 439 with a minimum grade of D- or BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-) and (BIOL 541 with a minimum grade of D- or BIOL 541W with a minimum grade of D- or NR 527 with a minimum grade of D-).
Mutual Exclusion: No credit for students who have taken GEN 705.
Grade Mode: Letter Grading

NR 703 - Watershed Water Quality Management
Credits: 4
Principles of land use as they relate to water quality and quantity. Lectures focus on biogeochemical cycles and the watershed approach to land and water resource management. Labs and field trips focus on methods of water sampling and analysis. One year of chemistry is recommended. Lab/field trips.
Prerequisite(s): NR 504 with a minimum grade of D-.
Equivalent(s): WARM 703
Grade Mode: Letter Grading
Special Fee: Yes

NR 706 - Soil Ecology
Credits: 4
Examines the ecological relationships between soil microorganisms and their biotic and abiotic environment, with emphasis on the role of soil microorganisms in biogeochemical cycling. Specific objectives are to examine the biodiversity present in soil systems, factors controlling microbial community composition and diversity, and linkages between soil microbial communities, soil physical properties, and soil organic matter and nutrient cycling dynamics. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D- or BIOL 409 with a minimum grade of D-) and CHEM 403 with a minimum grade of D-.
Equivalent(s): SOIL 706
Grade Mode: Letter Grading
Special Fee: Yes

NR 707 - Environmental Modeling
Credits: 4
Environmental Modeling introduces students to a range of key mathematical and computer modeling concepts and the ways they can be used to address important scientific questions. The course is divided into four topical sections: Population and Community Ecology, Hydrology, Biogeochemistry, and Ecosystems. In each section, modeling concepts and skills are presented together with environmental information to emphasize the linkage between quantitative methods and relevant scientific results.
Prerequisite(s): MATH 425 with a minimum grade of D- or MATH 424B with a minimum grade of D-.
Grade Mode: Letter Grading

NR 708W - Environmental Economics
Credits: 4
Environmental pollution, the market economy, and optimal resource allocation; alternative control procedures; levels of environmental protection and public policy; property right issues.
Attributes: Writing Intensive Course
Prerequisite(s): ECON 605 with a minimum grade of D-.
Equivalent(s): EREC 708, RECO 708
Grade Mode: Letter Grading

NR 712 - Mammalogy
Credits: 4
Evolution, ecology, behavior, physiology and diversity of mammals. The focus of the course is on conceptual issues, such as the relation of structure, function, physiology and ecology of species; reproductive physiology and life history strategies; and the evolution of mating systems and social structure. Familiarity of mammalian groups to the family level and identification of local fauna to species will be required. Lab.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D- or NR 439 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

NR 713 - Quantitative Ecology
Credits: 4
Basic quantitative concepts applied to ecological systems including: population and community dynamics, experimental design, spatial patterns, species abundance and diversity, community organization, metapopulations, and landscapes.
Prerequisite(s): (BIOL 528 with a minimum grade of D- or EREC 525 with a minimum grade of D- or NR 525 with a minimum grade of D-) and (NR 527 with a minimum grade of D- or BIOL 541 with a minimum grade of D- or BIOL 541W with a minimum grade of D-).
Equivalent(s): FORS 713
Grade Mode: Letter Grading

NR 720 - International Environmental Politics and Policies for the 21st Century
Credits: 4
Students examine policies for managing human activities to sustain the health of regional ecosystems and planetary life-support systems. Selected problems of the international commons (oceans, marine resources, atmosphere, migratory species); global and regional carrying capacity (population, resource consumption), internationally shared ecosystems (transboundary watersheds and waterbodies, tropical forests); and the relevant international institutions and politics for policy formation, conflict resolution, and implementation. Using a policy-analytic framework, students develop case studies to assess international policies and institutional arrangements to achieve the objectives of Agenda 21--Earth Summit Strategy to Save the Planet.
Attributes: Writing Intensive Course
Equivalent(s): EC 720
Grade Mode: Letter Grading

NR 724 - Resolving Environmental Conflicts
Credits: 4
Theories and practices of environmental dispute settlement. Roles of public, non-governmental and governmental organizations. Effectiveness of public participation initiatives in influencing public policy decisions and/or resolving environmental conflicts. Alternative approaches to consensus (policy dialogues, joint problem solving; strategic planning; negotiation, mediation) as well as litigation. Specific cases are critiqued and evaluated; conflict resolution skills are developed. Students observe and/or participate in ongoing local decision processes. Lab.
Attributes: Writing Intensive Course
Equivalent(s): EC 724
Grade Mode: Letter Grading
Special Fee: Yes

NR 729 - Silviculture
Credits: 4
The science and art of establishing, growing, and tending forests to meet multiple objectives. Basics of forest stand dynamics applied to the problems of timber management, wildlife habitat, water quality, and carbon sequestration.
Prerequisite(s): NR 425 with a minimum grade of D- and NR 527 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

NR 730 - Terrestrial Ecosystems
Credits: 4
Processes controlling the energy, water, and nutrient dynamics of terrestrial ecosystems; concepts of study at the ecosystem level, controls on primary production, transpiration, decomposition, herbivory; links to earth-system science, acid deposition, agriculture.
Prerequisite(s): (BIOL 409 with a minimum grade of D- or BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D- or BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D- or NR 439 with a minimum grade of D-) and (CHEM 403 with a minimum grade of D- or CHEM 405 with a minimum grade of D- or CHEM 411 with a minimum grade of D-) and (BIOL 541 with a minimum grade of D- or BIOL 541W with a minimum grade of D- or NR 527 with a minimum grade of D-).
Equivalent(s): EOS 730, FOR 730, FORS 730
Grade Mode: Letter Grading

NR 731 - Agriculture and Environmental Change: Challenges and Solutions
Credits: 4
Agriculture is the foundation of civilization, providing the food, fuel and fiber needed to sustain a growing human population. From the original land clearing to today, agriculture has profoundly impacted the environment and is now recognized as a major contributor to soil and water degradation and climate change. At the same time, climate change and other large-scale environmental changes are forcing adaptation of agricultural practices. This course examines interactions between agricultural systems and global environmental processes, including climate change, carbon cycling, nitrogen pollution and water resources. Students will develop an in-depth understanding of how agricultural practices contribute to environmental changes from local to global scales and the underlying biogeochemical drivers of change. We will evaluate frameworks like agroecology, regenerative agriculture, agroforestry, and climate-smart agriculture for their potential to mitigate environmental impacts. Students will learn to apply interdisciplinary thinking to develop solutions that balance crop productivity and environmental sustainability in a changing world. The course emphasizes biogeochemical understanding across spatial and temporal scales and couples to agroecosystem management frameworks to consider solutions.
Prerequisite(s): (NR 439 with a minimum grade of D- or BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading

NR 734 - Tropical Ecology
Credits: 4
This course introduces students to the ecology of different tropical ecosystems, and involves students in analyzing and interpreting ecological field data and remotely sensed data. An important emphasis is to understand patterns and processes across scales - from individual plants to ecosystems and landscapes. The course also addresses important global issues in the tropics, including climate change, land use change, diverse ecosystem services, and sustainable resource management.
Prerequisite(s): NR 527 with a minimum grade of D- or BIOL 541 with a minimum grade of D- or BIOL 541W with a minimum grade of D-.
Equivalent(s): FOR 734
Grade Mode: Letter Grading

NR 740 - Inventory and Monitoring of Ecological Communities
Credits: 4
Provides an introduction to the major concepts associated with monitoring change in ecological communities. Students develop an appreciation for such issues as: identification of appropriate baselines for comparison; use of indicator species; the tools used to inventory common, rare, and secretive species; how trend data are analyzed; and the implications of failing to detect an indicator species. Lab.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading
Special Fee: Yes

NR 743 - Addressing Arctic Challenges
Credits: 4
Students will gain knowledge on the effect of climate change on Arctic environmental, social, and built systems, and apply transdisciplinary approaches to addressing arctic challenges. This course employs inquiry-based, peer-to-peer, and self-driven approaches. Students will tackle a research project, including data analysis, with the aim of contributing new knowledge in the form of a proposal, publication, outreach product, or other.
Prerequisite(s): BIOL 528 with a minimum grade of D- or SOC 402 with a minimum grade of D- or MATH 539 with a minimum grade of D- or MATH 644 with a minimum grade of D-.
Grade Mode: Letter Grading

NR 744 - Biogeochemistry
Credits: 4
Examines the influence of biological and physical processes on elemental cycling and geochemical transformations from the molecular to the global scale, involving microorganisms, higher plants and animals and whole ecosystems; factors that regulate element cycles including soils, climate, disturbance and human activities; interactions among the biosphere, hydrosphere, lithosphere, and atmosphere; transformations of C, N, S, and trace elements.
Prerequisite(s): (BIOL 409 with a minimum grade of D- or BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D- or BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D- or NR 439 with a minimum grade of D-) and (CHEM 403 with a minimum grade of D- or CHEM 405 with a minimum grade of D- or CHEM 411 with a minimum grade of D-) and (BIOL 541 with a minimum grade of D- or BIOL 541W with a minimum grade of D- or NR 527 with a minimum grade of D-).
Grade Mode: Letter Grading

NR 745 - Forest Management
Credits: 4
Forest land ownership, management objectives, forest inventory regulation and policy, forest administration, professional responsibilities and opportunities. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): NR 527 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

NR 746 - Maps and Environmental Equity
Credits: 4
Environmental justice ensures the right to a safe, healthy, productive and sustainable environment for everyone, regardless of income, race, color, origin or income. Maps have become critical tools in environmental justice because maps bring visibility and definition to social-environmental problems. As diagrams – or representations of data – showing distributions over space and time, maps orient us, steer us, and make meaning of complex information. We trust them in depictions of, for example, cancer clusters or contaminated water. Yet maps are also capable of creating environmental injustice. Historical redlining, for example, used maps to limit financial services in certain neighborhoods in the 1930s-50s with long-term environmental impacts into the 2020s. Maps are not simply good or bad. This course thus explores environmental justice and injustice as depicted on maps, but also as embedded in the maps themselves. Who chooses their boundaries, for what purpose, and what consequence? How do maps make meaning and construct knowledge and to what social and political ends? What power dynamics do maps reflect and how do they become powerful themselves? Whose space and time do maps employ? Over the semester, we will make our own maps and bring awareness to the maps we create, including their values and assumptions, how they reflect and exercise power, and their potentials to create change. The goals of the course are to 1) bring a greater awareness to environmental justice and injustice in the maps we use and, 2) to create just maps.
Prerequisite(s): NR 658 with a minimum grade of D- or NR 760 with a minimum grade of D- or ESCI 777 with a minimum grade of D- or GEOG 591 with a minimum grade of D-.
Grade Mode: Letter Grading

NR 749 - Forest Inventory and Modeling
Credits: 4
Applied sampling and statistical techniques for assessing current forest conditions and predicting future growth, yield, and structure. Topics include plot and point sampling, ecological inventory, and evaluation of site quality and stand density.
Prerequisite(s): NR 415 with a minimum grade of D- and BIOL 528 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

NR 750 - Sustaining Biological Diversity
Credits: 4
This course examines the approaches to recover and restore declining populations and at-risk communities. Major concepts addressed include: population viability analysis; use of simulation models to explore conservation alternatives; integrating the political, economic, and social realities that affect natural resource management; the adaptive nature of any restoration of rare organisms and communities; and preparing for the challenges associated with invasive organisms and climate change.
Grade Mode: Letter Grading
Special Fee: Yes

NR 751 - Aquatic Ecosystems
Credits: 4
Energy flow and nutrient cycling in streams, rivers and lakes, with an emphasis on understanding the control of primary productivity, decomposition and community structure by both hydrologic and biotic drivers. Role of aquatic ecosystems in carbon and nitrogen budgets at watershed, regional, and global scales. Impacts of environmental changes such as global climate change and suburbanization on aquatic ecosystems. Lab.
Prerequisite(s): NR 504 with a minimum grade of D-.
Grade Mode: Letter Grading

NR 753 - Sustainability as Abundance
Credits: 2
"Instead of protecting the planet from human impact, why not redesign our activity to improve the environment? We can have a beneficial, sustainable footprint. Abundance for all." McDonough & Braungart in The Upcycle. A growing perspective is emerging in the sustainability field that refocuses attention away from managing scarcity, to creating new abundant possibilities. Managing scarcity is grounded in the continuing paradigm of what the human-environment relationship has been. Creating sustainability by tapping into and increasing abundance is grounded in a paradigm of what the human-environment relationship can be. Students will explore and expand their understanding of this perspective by utilizing and honing their critical reading, thinking, presentation and writing skills; by way of discussion, as well as individual and group research.
Grade Mode: Letter Grading

NR 754 - Sense of Place
Credits: 2
Costa Rica is the happiest country on Earth. Bhutan is a living laboratory for education. Bolivia has a Law of Mother Earth in its constitution. Cities and towns in the US create local solutions to problems of resource sustainability while the national dialogue stagnates. What drives some places to lay the foundations for sustainable futures, while others do not? Sense of Place is a powerful lends though which to view the relative achievements of places and organizations toward creating a sustainable future. The goals of this seminar are (1) to survey the Sense of Place literature and to analyze case studies of the role of Sense of Place in the success of sustainability efforts nationally and internationally; and (2) to research the role of Sense of Place in our local community environment and to relate it to stated goals in existing sustainability plans. To be considered as a capstone option for majors in Environmental and Conservation Sustainability, students must also register for NR 753 in the Fall semester.
Grade Mode: Letter Grading

NR 757 - Remote Sensing of the Environment
Credits: 4
Practical and conceptual presentation of the use of remote sensing and other geospatial technologies for mapping and monitoring the environment. This course begins with the use of aerial photographs (photogrammetry, and photo interpretation) and includes measures of photo scale and area, parallax and stereo viewing, object heights, flight planning, photo geometry, the electromagnetic spectrum, camera systems and vegetation/land cover mapping. The course concludes with an introduction to other geospatial technologies including digital image analysis, global positioning (GPS), and geographic information systems (GIS). Conceptual lectures are augmented with practical homework assignments and hands-on lab exercises. Lab.
Equivalent(s): FOR 757, FORS 757, GEOG 757
Grade Mode: Letter Grading
Special Fee: Yes

NR 759 - Digital Image Processing for Natural Resources
Credits: 4
Introduces digital remote sensing including multispectral scanners (Landsat and SPOT) radar, and thermal imagery. Hands-on image processing including filtering, image display, ratios, classification, registration, and accuracy assessment. GIS as it applies to image processing. Discussion of practical applications. Use of ERDAS image-processing software. Knowledge of PCs required.
Prerequisite(s): NR 757 with a minimum grade of D-.
Equivalent(s): FOR 759, FORS 759, GEOG 759
Grade Mode: Letter Grading

NR 760 - Geographic Information Systems in Natural Resources
Credits: 4
This course in geographic information systems (GIS), covers advanced theory, concepts, and applications of GIS for natural resource and related disciplines. Discussion of database structures, data sources, spatial data manipulation/analysis/modeling, data quality and assessment. Students conduct a project of their design exploring aspects of GIS most useful to them. Lecture emphasizes concepts and applications through a text and selected peer-reviewed articles. Lab uses the latest version of ArcGIS software and provides hands-on experience.
Prerequisite(s): NR 658 with a minimum grade of D-.
Equivalent(s): FOR 760, FORS 760, GEOG 760
Grade Mode: Letter Grading

NR 761 - Environmental Soil Chemistry
Credits: 4
Chemical transformations in soils are the basis for soil fertility and plant productivity in natural and managed ecosystems, and also influence key ecosystem processes including soil organic matter turnover and soil-atmosphere exchange of trace gases. This class will explore soil chemistry processes and transformations related to soil nutrient cycling, plant nutrient acquisition, and other critical environmental services.
Grade Mode: Letter Grading

NR 765 - Community Ecology
Credits: 4
Properties of biotic communities, especially biodiversity. Effects of physical stress, disturbance, competition, predation, positive interactions, and dispersal on community properties. Community dynamics, including succession and stability. Lecture and discussion.
Prerequisite(s): BIOL 528 with a minimum grade of D- and (BIOL 541 with a minimum grade of D- or BIOL 541W with a minimum grade of D- or NR 527 with a minimum grade of D- or FORT 527 with a minimum grade of D-).
Grade Mode: Letter Grading

NR 767W - Social Impact Assessment
Credits: 4
Provides a cross-disciplinary perspective on the issues, problems, and methods of Social Impact Assessment (SIA). Provides analytic approach and theoretical framework for the assessment of diverse events, including changes in the natural environment, the local economy, or dominant technology. SIA is required of most U.S. and Canadian federal- and state-sponsored projects that come under the National Environmental Protection Act, as well as all projects funded by international donor agencies.
Attributes: Writing Intensive Course
Equivalent(s): TOUR 767
Grade Mode: Letter Grading

NR 781 - Agroforestry
Credits: 4
This course introduces students to the principles and practice of agroforestry—the integration of trees with crops and/or livestock to provide multiple benefits. Students gain knowledge of Indigenous and modern agroforestry systems, their global distribution and characteristics, the scientific principles underlying interactions between trees, crops, and livestock, and their management to optimize benefits. Students explore the potential for agroforestry to serve as a climate-smart, sustainable strategy for enhancing food production and ecosystem services, and gain practical field experience in designing agroforestry systems appropriate for New England.
Prerequisite(s): NR 527 with a minimum grade of D- or AGFS 502 with a minimum grade of D- or SAFS 502 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

NR 782 - Forest Health in a Changing World
Credits: 4
Forests cover over 30% of the land surface of the Earth and are incredibly important ecologically, economically, and to the health of the planet. While forests show great capacity to withstand disturbance, these ecosystems are increasingly threatened worldwide by climate change, native and introduced insects and disease, poor management practices, land clearing, drought, fire, and pollution. This course offers an overview of the dominant threats to forests, their causes and consequences, and options for monitoring, management, and mitigation.
Grade Mode: Letter Grading
Special Fee: Yes

NR 784 - Sustainable Living - Global Perspectives
Credits: 4
The pursuit of sustainable solutions to living in our contemporary world is a global endeavor. In this course, the concept of living sustainably is explored from a broad international perspective. Global scale issues impacting sustainable resource use are considered, including population growth, economic globalization and development, social equity, and cultural values. We will expand our awareness of alternatives to those current practices that impede the sustainability of human societies as part of the earth's natural systems. We will also pursue an understanding of the interrelated socio-economic conditions, combined with social and personal ethics and values necessary to move toward a more sustainable future. And each of us will come to value what sustainable living means for our own lives.
Prerequisite(s): NR 437 with a minimum grade of D- or NR 435 with a minimum grade of D- or NR 435H with a minimum grade of D-.
Equivalent(s): EC 784
Grade Mode: Letter Grading

NR 785 - Systems Thinking for Sustainable Solutions
Credits: 4
The problems facing our world are complex and multi-dimensional. This course introduces students to the basics of systems thinking and the socio-ecological systems framework, a marriage of both social and natural science approaches to understanding problems. Using this framework, we will dive into complex natural systems, such as tropical marine fisheries and probe the sustainability of coffee to understand driving factors that inhibit (or enable) successful resource management. These factors may include the culture and history of resource users alongside the relevant ecosystem interactions. Students should expect to conduct their own research through the application of learned research methods on systems of their interest.
Prerequisite(s): NR 437 (may be taken concurrently) with a minimum grade of D- or NR 435 (may be taken concurrently) with a minimum grade of D- or NR 435H with a minimum grade of D-.
Equivalent(s): EC 785
Grade Mode: Letter Grading

NR 786 - Leadership for Sustainability
Credits: 4
In this course we review and evaluate current knowledge and practice regarding the attainment of sustainability in social and environmental relations. We particularly focus on the meaning and qualities of leadership for achieving a sustainable future. Along the way, we also reflect on our own leadership styles and qualities. Topics include the role of leaders and leadership practices in government, business, academia etc; concepts and theories for achieving social change; and case studies exemplifying a range of leaders and approaches toward sustainability.
Attributes: Writing Intensive Course
Prerequisite(s): NR 437 with a minimum grade of D- or NR 435 with a minimum grade of D- or NR 435H with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

NR 787 - Advanced Topics in Sustainable Energy
Credits: 4
This course engages students in advanced topics in sustainable energy. Course reviews basic structures of our energy system, energy markets and economics, and the environmental, economic and technological of energy landscape. Focus is on electricity and building use with introductions to the transportation system. Students gain the knowledge to evaluate innovations in technology, policy and financing necessary to implement sustainable energy goals from conservation and efficiency to renewables and energy storage.
Grade Mode: Letter Grading
Special Fee: Yes

NR 795 - Investigations
Credits: 1-4
Investigations in Natural Resources may include topics in environmental conservation, forestry, soil and watershed management, ecosystems, and wildlife management. Special fee on some topics.
Grade Mode: Letter Grading
Special Fee: Yes

NR 795W - Investigations
Credits: 1-4
Investigations in Natural Resources may include topics in environmental conservation, forestry, soil and watershed management, ecosystems, and wildlife management.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

NR 799 - Honors Senior Thesis
Credits: 1-4
Honor/thesis students conduct an independent research project, relevant to the student's area of specialization in the major, under the direction of a faculty sponsor. Students submit a research proposal, write a final report, and provide an oral presentation. One or two semester sequence.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Neuropsychology (NPSY)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

NPSY 600 - Behavioral Neuroscience
Credits: 4
This course is an introduction to behavioral neuroscience, with a focus on clinical applications. The course begins with an in-depth overview of the structure and function of neurons and then moves into topics such as sensory processing, psychopathology, and cognition. Students will learn about neural networks that give rise to these behaviors, and how the brain interacts with other organs. Additionally, students will learn through case studies.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Grade Mode: Letter Grading

NPSY 700 - Neuroimaging: Theory and Application
Credits: 4
Neuroimaging techniques are commonly used in both clinical and research settings. This course introduces students to the fundamental principles governing neuroimaging. Topics covered include neuroanatomy and neurobiology reviewed in the context of different neuroimaging methods such as computed tomography, magnetic resonance imaging, electroencephalogram, and position emission tomography. We will review the various methods for processing structural, functional, and multimodal imaging datasets. Students will also gain hands on experience processing neuroimaging data during computer lab simulations. Anatomy coursework is recommended but not required.
Prerequisite(s): PSYC 401 with a minimum grade of D- and PSYC 402 with a minimum grade of D- and (PSYC 531 with a minimum grade of D- or NPSY 600 with a minimum grade of D-).
Grade Mode: Letter Grading

NPSY 795 - Independent Study
Credits: 1-4
Arranged by the student with a neuropsychology, psychology or biology faculty sponsor. Learner/sponsor contract required. Minimum time commitment: three hours per credit per week.
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and NPSY 600 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 1 time.
Grade Mode: Letter Grading

NPSY 798 - Capstone
Credits: 0
This is a zero credit course to indicate on the transcript that the capstone requirement is fulfilled.
Grade Mode: Credit/Fail Grading

Neuroscience and Behavior (NSB)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

NSB 400 - Topics Neuroscience & Behavior
Credits: 1
This seminar type course is designed as an introductory experience for incoming first-year students, although it may be taken by students transferring into the major. Topics covered will include sensory biology, learning and memory, homing and navigation, neuromodulators and stress, reproductive behaviors. The format will rely heavily on discussion, prompted either by assigned readings or presentations by program faculty on their areas of expertise.
Grade Mode: Credit/Fail Grading

NSB 500 - Fundamentals of Neuroscience and Behavior I
Credits: 3
The course will introduce students to the fundamental neural processes underlying behavior. It will begin with a detailed examination of the properties of individual neurons and then move on to demonstrate how neurons can communicate together to produce complex behaviors. Some of the basic concepts that will be covered will include: the molecular basis of electrical and chemical communication, sensory transduction and processing, neuropharmacology, the neural basis of reflexes and simple behavior, development of the nervous system and the influence of external stimuli on neural processing.
Co-requisite: NSB 501
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and CHEM 403 with a minimum grade of D- and (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D-).
Grade Mode: Letter Grading

NSB 501 - Fundamentals of Neuroscience and Behavior I Laboratory
Credits: 2
The course is designed to expose students to some of the classic experiments in cellular and molecular Neurobiology. They will record from sensory and motor neurons, stain and view neurons, carry out simple behavior experiments and record from muscles in freely behaving animals. The laboratory exercises will run parallel with the concepts taught in lecture and complement the lecture material in many ways. Students will conduct actual experiments, analyze the results and write lab reports as well.
Co-requisite: NSB 500
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and CHEM 403 with a minimum grade of D- and (CHEM 404 with a minimum grade of D- or CHEM 404H with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

NSB 502 - Fundamentals of Neuroscience and Behavior II/Systems Neuroscience
Credits: 3
This course is an introduction to the questions addressed by scientists who aim to understand the biological basis of behavior and cognition. This semester we will review the major organization of the central nervous system and how these systems interact with each other to produce behavior and cognition. Major topics will include: the development and emergence of behavior; movement; the neural basis of cognition, and language, thought, affect and learning.
Co-requisite: NSB 503
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D-) and CHEM 403 with a minimum grade of D- and CHEM 404 with a minimum grade of D- and NSB 500 with a minimum grade of D- and NSB 501 with a minimum grade of D-.
Grade Mode: Letter Grading

NSB 503 - Fundamentals of Neuroscience and Behavior II Laboratory
Credits: 2
This laboratory class with compliment the material being taught in NSB 502. The laboratory will focus on behavioral and cognitive neuroscience experiments. Students will learn about neuroanatomy and neuroscience research methods, including experimental design, data collection, statistical analysis, data interpretation, and manuscript preparation through conducting actual experiments. Students will write research reports describing their experiments and will receive some basic computer programming and research ethics training.
Co-requisite: NSB 502
Prerequisite(s): NSB 500 with a minimum grade of D- and NSB 501 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

NSB 600 - Field Experience in Neuroscience and Behavior
Credits: 1-4
A supervised experience providing the opportunity to apply academic experience in settings associated with future professional employment and/or related graduate opportunities relevant to neuroscience and behavior. Must be approved by a faculty advisor selected by the student.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

NSB 710 - Brain & Behavior: A Systems Approach
Credits: 3
The goal of this course is to explore foundational concepts in neuroscience with an emphasis on a systems-based perspective. Topics will span molecules to behavior including the cellular basis on neural communication, sensory processing, motor control, homeostasis, emotion, cognitive behavior, and disease of the nervous system. Over the course of the semester, students will read primary literature in the field of neuroscience and develop skills to understand and apply a systems neuroscience perspective.
Prerequisite(s): NSB 500 with a minimum grade of C- and NSB 501 with a minimum grade of C- and NSB 502 with a minimum grade of C- and NSB 503 with a minimum grade of C-.
Grade Mode: Letter Grading

NSB 727 - Animal Communication
Credits: 4
This course examines the principles underlying how animals communicate with each other and why they communicate the way they do by using perspectives drawn from a broad range of disciplines including physics, chemistry, ecology, psychology, economics, and behavioral ecology. Students will explore the primary literature, and work in teams to conduct independent research. The course is intended for advanced undergraduate or graduate students interested in neuroscience and behavior, evolution, wildlife and conservation biology, or zoology.
Prerequisite(s): BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-.
Grade Mode: Letter Grading

NSB 795 - Special Investigations
Credits: 1-4
Independent research with any member of the NSB faculty in various areas including, but not limited to, neuroscience, neuroendocrinology, animal behavior.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): NSB 795W
Grade Mode: Letter Grading

NSB 798 - Capstone
Credits: 0
This is a 0 credit course to indicate on the transcript that capstone requirement is fulfilled.
Grade Mode: Credit/Fail Grading

NSB 799 - NSB Senior Thesis
Credits: 2-4
Working under the direction of a faculty sponsor, the student plans and executes independent research resulting in a written thesis and public presentation. Limited to students entering their senior year. A two-semester sequence 2-4 credits each semester. IA (continuous grading) given first semester.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

NSB 799H - Honors Senior Thesis
Credits: 2-4
Working under the direction of a faculty sponsor, the student plans and executes independent research resulting in a written thesis and public presentation. Limited to student entering their senior year or under exceptional circumstances their junior year. Required for students working toward University Honors or Honors-in-Major. A two-semester sequence 2-4 credits each semester. IA (continuous grading) given first semester.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Nursing (NUR) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

NUR 600 - Enhancing Your Nursing Career
Credits: 2
This course provides the RN to BSN student the opportunity to explore the contemporary nursing issues related to the major concepts that form a basis for the program outcomes and the additional nursing courses. Nursing knowledge is gained through a combination of experiential, evidence based, and classroom experiences. This course introduces the structure of evaluation and includes emphasis on evidence based practice, professional trends, and an opportunity to explore potential capstone project ideas.
Equivalent(s): NUR 600G
Grade Mode: Letter Grading

NUR 615 - Evidence-Based Nursing
Credits: 4
The contemporary nurse is continually faced with a wide variety of problems encountered in the care of patients. Thus the nurse must have a repertoire of problem-solving skills that is based on sound evidence. Identification, evaluation, application, and/or compilation of evidence from a variety of resources to apply to health-related problems of individuals, families, communities, and the health care delivery system are essential tools of the contemporary nurse. Students will identify problems encountered in practice and find pertinent resources to assist in resolving them. The student will apply specific criteria to assess the quality of evidence, and as part of a team, will discuss whether it could feasibly and ethically be applied to care of patients. In addition, students will identify a problem or aspect of a problem to be researched, find relevant resources and/or literature, and determine what additional information is needed to resolve the problem. In collaboration with team members, a method of gathering pertinent data will be developed. Active R.N. License, or transfer credit in Statistics accepted as requirements prior to taking this course.
Prerequisite(s): (NUR 600 with a minimum grade of C or NUR 600G with a minimum grade of C) and (MTH 504 with a minimum grade of C or MATH 504G with a minimum grade of C).
Equivalent(s): NUR 602G
Grade Mode: Letter Grading

NUR 635 - The Nurse as Leader
Credits: 4
The nurse of today and tomorrow must inevitably be a leader, whether at the bedside in assisting an individual patient toward enhanced health or leading health care organizations, public policy initiatives, and professional associations to maximize their contributions to the health of the nation. The nurse, as the most plentiful, versatile, and wide-spread of health care providers, must be prepared to develop and implement new visions and models of care delivery, applications of technology, stewardship of costly resources, evaluation and improvement of health care quality, and delivery of safe, effective health care in a variety of settings. The student will explore leadership theories and styles, evaluate appropriate application of several leadership approaches, practice the leadership role in a project to create a health-care related change, and offer collegial peer evaluation of classmates' work. Active R.N. License required prior to taking this course.
Prerequisite(s): NUR 615 with a minimum grade of C or NUR 602G with a minimum grade of C.
Equivalent(s): NUR 606G
Grade Mode: Letter Grading

NUR 670 - Nursing Care of Populations
Credits: 4
This course expands the student's focus from the care of individual patients to the care of aggregates. Aggregates may range from small to large, and include families, groups, communities, and the global population. Students will investigate the concept of community assessment and use a systems-based epidemiological model to organize data about health problems and populations at risk. Health challenges of specific diverse populations will be investigated along with resources for change and health promotion within the community. Students will perform a problem-focused literature review about a selected problem and create a community-based plan of care. Students will also become familiar with public health resources and functions. This course involves a clinical experience which comprises thirty hours spent in virtual simulation.
Prerequisite(s): NUR 615 with a minimum grade of C or NUR 602G with a minimum grade of C.
Equivalent(s): NUR 603G
Grade Mode: Letter Grading
Special Fee: Yes

NUR 700 - Nursing Implications of Genetics and Genomics
Credits: 4
The human genome project has forever changed the understanding of human nature, health, illness, and approaches to patient care. During this course, topics will include current applications of genomic information and genetic interventions in health care. Students will learn to assess patients for possible genetic risk factors, genetic mutations occurring as a consequence of person-environment interaction, and specific health problems with known genetic bases. The nurse's role in assessment, case-finding, referral, and intervention will be emphasized. Students will also determine present regional applications of genetic medicine and familiarize themselves with existing community resources for assisting individuals with genetic issues.
Prerequisite(s): NUR 615 with a minimum grade of C or NUR 602G with a minimum grade of C.
Equivalent(s): NUR 607G
Grade Mode: Letter Grading

NUR 740 - Nursing Care of Vulnerable Populations
Credits: 4
Nursing care of vulnerable populations requires the nurse to integrate concepts of vulnerability, disparities, and social determinants of health with prior knowledge in caring for individuals and populations. This course includes information from different cultures and at-risk groups of individuals considered to be vulnerable. Key concepts to be covered include, understanding of the unique challenges in caring for the vulnerable, relevant health care research, and skills required to work with and advocate for vulnerable populations.
Prerequisite(s): NUR 670 with a minimum grade of C or NUR 603G with a minimum grade of C.
Equivalent(s): NUR 604G, NUR 610G
Grade Mode: Letter Grading

NUR 795 - Integrative Capstone: Nursing Practicum
Credits: 4
This course offers the opportunity to develop and implement a personalized precepted experience. The experience will include a project designed to solve an evidence-based problem or improve the quality of an aspect of nursing practice in the work place. The student will incorporate throughout the practicum the knowledge, skills, and enhanced professionalism acquired in the B.S.N. program. The role of the faculty will be that of consultant. The project will be presented and/or implemented in the work place as well as in the peer group, and the student will elicit evaluation of his/her work from colleagues and peers. Using evaluation feedback, the student will hypothesize and present ways of improving the project's quality. Prior to capstone enrollment, students are expected to complete the majority of their required major courses along with having an Active R.N. License. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of C or CRIT 602G with a minimum grade of C or CRIT 502G with a minimum grade of C) and (IDIS 601 with a minimum grade of C or IDIS 601G with a minimum grade of C).
Equivalent(s): NUR 655G
Grade Mode: Letter Grading

Nursing (NURS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

NURS 450 - Making Babies: Technology, Nature, and Social Context
Credits: 4
Examines the process of human birth focusing on the emergent technologies of human genetics, assisted fertility technologies, prenatal diagnosis and treatment, as well as the appropriate and inappropriate use of technology through the labor, delivery, and post-partum experience. The social, cultural, political, and historical context for the development and application of these technologies is explored.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): HHS 450
Grade Mode: Letter Grading

NURS 500 - Introduction to Professional Nursing
Credits: 2
The course provides an overview of professional nursing with a focus on reflective thinking. A synthesis of current and projected trends in nursing practice and education, with an introduction to topics on ethical, social, and legislative issues, are explored. This course is divided into five modules: nursing as a career, nursing as a profession, nursing as art and science, nursing as communication, and nursing and relationship-centered care.
Equivalent(s): NURS 530
Grade Mode: Letter Grading
Special Fee: Yes

NURS 501 - Research for Nursing Professionals
Credits: 4
The course focuses on the translation of current evidence into nursing practice through the identification of practice issues, appraisal and application of evidence, and the evaluation of outcomes. Development of evidence is examined using the research process. Concepts explored include research ethics and legal precepts, clinical judgment in knowledge development and application, and the integration of client values and preferences. Students learn to use reliable evidence to inform practice and make clinical judgments to promote nursing best practice.
Equivalent(s): HHS 598, NURS 531, NURS 641
Grade Mode: Letter Grading
Special Fee: Yes

NURS 504 - Disease and Drugs I
Credits: 4
The two semester course advances knowledge of human physiology and the pathophysiological variations in selected global disease states in adults and children. Student explore how the human body uses its adaptive powers to maintain a steady state and how alterations affect normal processes. Pharmacological agents used on these alterations are examined.
Prerequisite(s): BMS 507 with a minimum grade of C and BMS 508 with a minimum grade of C and BMS 501 (may be taken concurrently) with a minimum grade of C.
Equivalent(s): NURS 532
Grade Mode: Letter Grading

NURS 505 - Diseases and Drugs II
Credits: 4
The two semester course advances knowledge of human physiology and the pathopsychological variations in selected global disease states in adults and children. Students explore how the human body uses its adaptive powers to maintain a steady state and how alterations affect normal processes. Pharmacological agents used on theses alterations are examined.
Co-requisite: NURS 506, NURS 601
Prerequisite(s): NURS 500 with a minimum grade of C.
Equivalent(s): NURS 532
Grade Mode: Letter Grading

NURS 506 - Human Development, Interaction and Learning Across the Lifespan
Credits: 4
The course emphasizes human development, interaction and learning across the lifespan as essential to safe, effective relationship-centered care. An exploration of selected theoretical perspectives on human development, education and learning and group development prepares students to engage in professional practice.
Co-requisite: NURS 505, NURS 601
Prerequisite(s): NURS 500 with a minimum grade of C.
Grade Mode: Letter Grading

NURS 516 - Health Assessment and Nursing Fundamentals
Credits: 0 or 4
Focuses on the acquisition of psychomotor and assessment skills required for the delivery of safe nursing care. Students begin by learning clinical skills in the simulation setting and then using those skills with supervision in the clinical setting. An additional focus of this course is understanding fundamental nursing concepts as they pertain to providing safe, effective care.
Co-requisite: NURS 516C
Equivalent(s): NURS 534
Grade Mode: Letter Grading

NURS 516C - Health Assessment and Nursing Fundamentals Clinical
Credits: 2
This clinical course is designed to provide experiences to apply the knowledge to the skills required to perform a systematic examination of a healthy adult, to perform basic psychomotor skills and to record findings appropriately. Students implement the nursing process by obtaining health histories, performing physical and psychosocial assessments, establishing a database, and formulating initial nursing plans. Students become familiar with the nursing simulation lab.
Co-requisite: NURS 516
Equivalent(s): NURS 534
Grade Mode: Letter Grading

NURS 517C - Clinical Integration
Credits: 0 or 2
This course focuses on continued development of nursing skills necessary for promoting health in adults. Clinical practicum focuses on restorative care by providing supervised professional nursing practice for development of multidimensional assessment skills, decision-making processes, and evidence-based strategies and interventions for patients transitioning across the health care continuum. Application of evidence-based practice may include rehabilitative, end of life and palliative care.
Grade Mode: Letter Grading

NURS 530 - Professional Nursing Concepts and Theories
Credits: 4
This course introduces students to the foundational concepts, theories, and professional values of nursing. Emphasizing person-centered care, interprofessional collaboration, and systems-based practice, students explore the evolving role of the nurse within diverse healthcare environments. Key topics include nursing theory, ethics, population health, quality and safety, informatics, and leadership development. The course aligns with multiple AACN Essentials domains to support professional identity formation and readiness for practice.
Equivalent(s): NURS 500
Grade Mode: Letter Grading

NURS 531 - Evidence Based Innovations in Nursing
Credits: 4
Evidence-Based Innovations in Nursing utilizes competency-based learning strategies to introduce students to the foundational principles of evidence-based practice, interdisciplinary collaboration, and innovation in healthcare. Through the integration of research, theory, policy, and population health data, students will explore factors influencing health outcomes and evaluate nursing practices in diverse settings. Emphasis is placed on ethical, culturally responsive, and patient-centered decision-making. Students will engage in critical inquiry to identify performance gaps and health inequities, apply evidence to support practice change, and develop advocacy strategies to improve quality and safety in care delivery. The course fosters the use of data, effective communication, and teamwork to propose innovative, evidence-informed solutions in nursing practice.
Equivalent(s): NURS 501
Grade Mode: Letter Grading

NURS 532 - Integrative Pathopharmacology in Nursing
Credits: 4
This competency-based course explores key concepts in pathophysiology and pharmacology related to common and complex health conditions. Students will explore disease mechanisms alongside pharmacological interventions emphasizing drug actions, indications, side effects, and nursing responsibilities. The course supports the development of clinical judgment and evidence-based decision-making. Competency attainment is demonstrated through application of knowledge and case--based scenarios and critical analysis of current clinical guidelines.to ensure safe, effective and equitable treatment planning.
Prerequisite(s): BMS 501 (may be taken concurrently) with a minimum grade of D- and BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-.
Equivalent(s): NURS 504, NURS 505
Grade Mode: Letter Grading
Special Fee: Yes

NURS 534 - Fundamentals of Nursing Practice
Credits: 6
This foundational course introduces essential nursing competencies that support the art and science of nursing. Emphasis is placed on competency-based learning experiences that foster clinical judgement, cultural humility, inter-professional collaboration, and the promotion of safe care delivery. Through reflective practice and faculty-guided feedback, learners will cultivate professional identity, uphold ethical standards, and advance a commitment to lifelong learning within a dynamic healthcare environment.
Prerequisite(s): BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D- and BMS 501 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): NURS 516, NURS 516C
Grade Mode: Letter Grading
Special Fee: Yes

NURS 535 - Death and Dying
Credits: 4
Encompasses peoples' responses to death throughout the lifecycle. Theories of death, dying, and grieving discussed. Students explore cultural influences, legal, and ethical dilemmas; the biopsychosocial needs of people facing life-threatening situations; resources for care of the dying; death rituals; and surviving a major loss.
Attributes: Social Science (Discovery); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

NURS 601 - Function and Wellbeing of Older Adults
Credits: 2
This course focuses on developing knowledge necessary for promoting healthy aging and wellness across the lifespan. Multidimensional assessment skills are utilized to develop appropriate evidence-based interventions to assist individuals and families to maintain wellness and promote healthy lifestyles, and enhance the quality of life for older adults with acute and chronic conditions. Students will explore nursing issues and principles of promoting wellness across the health care continuum including end of life and palliative care.
Grade Mode: Letter Grading

NURS 611 - Care of the Adult with Acute Illness I
Credits: 0 or 4
The first of two courses focused on adult health nursing of clients with commonly occurring disease states in the acute care setting. Course builds on previously learned knowledge of physical assessment and technical skills to focus on key components of acute care nursing. Special emphasis placed on the etiology, clinical evaluation and use of evidence-based nursing interventions to manage specific health problems related to cardiovascular, hematologic, pulmonary, endocrine and renal systems. The advanced skills and techniques required to care for clients with commonly occurring disease states is included.
Co-requisite: NURS 611C
Equivalent(s): NURS 630
Grade Mode: Letter Grading

NURS 611C - Care of the Adult with Acute Illness I Clinical
Credits: 2
Designed to provide the student with opportunities to apply the nursing process and clinical judgment within an acute care setting to clients with commonly occurring disease states. The experience focuses on the application of knowledge and skills, evidence-based practice, clinical judgment and relationship-centered care.
Co-requisite: NURS 611
Prerequisite(s): NURS 505 with a minimum grade of C.
Equivalent(s): NURS 630
Grade Mode: Letter Grading

NURS 612 - Care of the Adult with Acute Illness II
Credits: 0 or 4
This is the second of two courses focused on adult health nursing of clients with commonly occurring disease states in acute care nursing. The course builds on previously learned knowledge of physical assessment and technical skills to focus on key components of acute care nursing. Special emphasis is placed on the etiology, clinical evaluation and use of evidence-based nursing interventions to manage specific health problems related to gastrointestinal, neurological, musculoskeletal systems and clients undergoing surgery. Complex client issues related to oncologic, immunologic and shock states are introduced. The advanced skills and interventions required to care for clients with commonly occurring disease states and those undergoing surgery are included.
Co-requisite: NURS 612C
Prerequisite(s): NURS 611 with a minimum grade of C.
Equivalent(s): NURS 631
Grade Mode: Letter Grading

NURS 612C - Care of the Adult with Acute Illness II Clinical
Credits: 2
Course is designed to provide the student with opportunities to apply the nursing process and clinical judgment within an acute care setting to clients with commonly occurring disease states and those undergoing surgery. The experience focuses on the application of knowledge and skills, evidence-based practice, clinical judgment and relationship-centered care.
Co-requisite: NURS 612
Prerequisite(s): NURS 611 with a minimum grade of C.
Equivalent(s): NURS 631
Grade Mode: Letter Grading
Special Fee: Yes

NURS 616 - Living with Mental Illness
Credits: 2
This course is designed to provide an understanding of the concepts of mental health and major factors affecting human behavior and interaction. Specific theoretical concepts guiding nurse-client interactions are utilized as a vehicle for supporting the person's and family's optimum state of well-being.
Co-requisite: NURS 616C
Equivalent(s): NURS 632
Grade Mode: Letter Grading

NURS 616C - Living with Mental Illness Clinical
Credits: 2
In this psychiatric nursing clinical course the nursing process and a situation-based interpretive approach serve as framework for professional nursing action. A special focus is placed on the integration of personal knowledge, therapeutic use of self and communication skills inherent in nurse-client relationships. Through a variety of clinical experiences, the student applies mental health concepts and principles of therapeutic communication in caring for people and families with alterations in mental health.
Co-requisite: NURS 616
Equivalent(s): NURS 632
Grade Mode: Letter Grading

NURS 621 - Maternal and Newborn Nursing
Credits: 0 or 2
The course allows students an opportunity to develop necessary knowledge, attitudes and skills required for the provision of safe care to child bearing women and their families. Childbirth is viewed as part of the life cycle with emphasis on women and family-centered care, normal physiological childbirth, client advocacy and the provision of therapeutic nursing practice.
Co-requisite: NURS 621C
Equivalent(s): NURS 633
Grade Mode: Letter Grading

NURS 621C - Maternal Newborn Nurs Clin
Credits: 2
This clinical component of NURS 621, a course that has family as the focus for nursing practice, introducing the student to the care of young families throughout pregnancy, birth, and child-rearing periods. The health needs of the young family are discussed in terms of major morbidity/mortality and contemporary issues. This clinical course offers students experiences in various clinical settings in order to provide opportunities for the development of professional practice roles in maternal health.
Co-requisite: NURS 621
Equivalent(s): NURS 633
Grade Mode: Letter Grading

NURS 627 - Clinical Judgment in Nursing
Credits: 4
This course is designed to apply and analyze clinical reasoning and judgement in a variety of situations, focusing on the ability to prioritize and individualize evidence-based nursing interventions.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

NURS 630 - Nursing Care of Adults with Chronic Conditions
Credits: 6
This nursing course focuses on the management of chronic conditions in adult populations across diverse care settings, with particular emphasis on evidence-based, protocol-driven approaches to promote optimal patient outcomes. Students will build on foundational nursing skills to plan and deliver individualized care that integrates patient-specific factors, clinical judgment, and effective communication strategies. Emphasis is placed on seamless care transitions, continuity planning, and collaborative team coordination to manage complex, chronic conditions.
Prerequisite(s): NURS 530 with a minimum grade of D- and NURS 531 with a minimum grade of D- and NURS 532 with a minimum grade of D- and NURS 534 with a minimum grade of D-.
Equivalent(s): NURS 611, NURS 611C
Grade Mode: Letter Grading
Special Fee: Yes

NURS 631 - Nursing Care of Adults with Acute Conditions
Credits: 6
This course prepares nursing students to deliver safe, evidence-informed care to adults experiencing acute health conditions. Building on foundational knowledge in physical assessment, pathophysiology, and technical skills, students will explore etiology, clinical evaluation, and nursing interventions associated with acute illness. Emphasis is placed on developing clinical judgment, applying nursing science, and integrating interdisciplinary theories to guide individualized care. Through simulation, case studies, and clinical experiences, learners will strengthen competencies in professional identity, evidence-based practice, systems thinking, and informatics, while fostering relationship-centered care and a culture of safety.
Prerequisite(s): NURS 530 with a minimum grade of D- and NURS 531 with a minimum grade of D- and NURS 532 with a minimum grade of D- and NURS 534 with a minimum grade of D-.
Equivalent(s): NURS 612, NURS 612C
Grade Mode: Letter Grading
Special Fee: Yes

NURS 632 - Psychiatric-Mental Health Nursing
Credits: 6
This course prepares nursing students to deliver holistic, evidence-based care to individuals, families, and communities experiencing mental health challenges. Emphasizing culturally responsive and ethically sound practice, students will integrate psychosocial, neurobiological, and legal considerations into care planning. Through interprofessional collaboration, data analysis, and use of health technologies, students will design and evaluate mental health interventions. Reflective practice and professional accountability are central to developing therapeutic relationships and promoting safe, compassionate psychiatric nursing care.
Prerequisite(s): NURS 530 with a minimum grade of D- and NURS 531 with a minimum grade of D- and NURS 532 with a minimum grade of D- and NURS 534 with a minimum grade of D-.
Equivalent(s): NURS 616, NURS 616C
Grade Mode: Letter Grading
Special Fee: Yes

NURS 633 - Nursing Care in Reproductive and Sexual Health
Credits: 6
This course prepares students to assess the physiological, psychological, and sociocultural dimensions of reproductive and sexual health across diverse populations. Students apply evidence-based practices to promote safe, high-quality care within complex healthcare systems. Learners evaluate health policies and advocate for equitable access to services, emphasizing interprofessional collaboration and ethical decision-making. Through classroom, clinical and simulated experiences, students demonstrate leadership, accountability, and professional values in the provision of person and family-centered care. The course integrates generalist nursing competencies to prepare students for holistic, culturally responsive practice.
Prerequisite(s): NURS 530 with a minimum grade of D- and NURS 531 with a minimum grade of D- and NURS 532 with a minimum grade of D- and NURS 534 with a minimum grade of D-.
Equivalent(s): NURS 621, NURS 621C
Grade Mode: Letter Grading
Special Fee: Yes

NURS 648W - Nursing Honors Seminar I
Credits: 1-4
Honors seminar is designed to expand the knowledge and skills to develop a research thesis or quality improvement capstone project. Literature review and methods development will be a major focus under the direction of a faculty advisor.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 5 credits.
Grade Mode: Letter Grading

NURS 695 - Independent Study
Credits: 2-4
In-depth study with faculty supervision. May be repeated for different topics.
Grade Mode: Letter Grading

NURS 700 - Nursing Teaching Assistantship Practicum
Credits: 1-2
This course covers best practices, norms, and expectations in performing the duties of a teaching assistant. Strategies for effective communication with students and instructors, and institutional policies are explored and reinforced. Students serve as teaching assistants in assigned class and/or lab activities. Assignments to be made by the course instructor may include teaching and/or lab duties.
Repeat Rule: May be repeated for a maximum of 4 credits. May be repeated up to 2 times.
Grade Mode: Credit/Fail Grading

NURS 702 - Child Health Nursing
Credits: 0 or 2
The course considers the child in the context of family as the focus for nursing practice, introducing the student to the care of children using a developmental approach. Commonly occurring health transitions and alterations occurring from infancy through adolescence are examined. A survey of child health explores both professional practice roles of the pediatric nurse in health promotion and illness as well as acute and chronic conditions that impact children at various stages of development.
Equivalent(s): NURS 730
Grade Mode: Letter Grading
Special Fee: Yes

NURS 702C - Child Health in the Community Clinical
Credits: 2
Semester long clinical course focused on the practice of pediatric nursing in the community.
Co-requisite: NURS 702
Equivalent(s): NURS 730
Grade Mode: Letter Grading

NURS 704 - Public Health Nursing
Credits: 4
This course prepares the student for population-focused practice. Emphasis is placed on the synthesis of concepts, theories, knowledge and practice from nursing and public health sciences. Students explore the concepts of: community as client, community assessment, health promotion, health protection, illness prevention and vulnerability from a public health nursing perspective.
Equivalent(s): NURS 734
Grade Mode: Letter Grading

NURS 704P - Public Health Nursing Project
Credits: 2
Semester long experience working in teams with a community organization to address a current public health issue. Learning focuses on working in teams to develop a strategic understanding of the identified public health issue and to design, implement, and evaluate a targeted intervention project.
Grade Mode: Letter Grading

NURS 705 - Contemporary Leadership within Health Care Systems
Credits: 4
The course explores the dynamic nature of the healthcare system and practice environments that impact nursing. Emphasis is placed on relationship of ethics, power, change, conflict, communication and politics in health care systems. Focus is placed on the use of models of leadership and management to effectively negotiate change, provided safe quality care, and promote professional practice in the delivery of relationship-centered care.
Co-requisite: NURS 721
Equivalent(s): NURS 732W
Grade Mode: Letter Grading

NURS 711 - Clinical Judgment in Complex Illness
Credits: 0 or 2
This course further develops and refines critical thinking skills by student participation in clinical scenarios and de-briefings. Students prepare for the care of patients with complex illness and engage in health assessment, psychomotor skills, and implementing the nursing process to develop a plan of care. May be waived with special circumstances.
Grade Mode: Letter Grading

NURS 721 - Integrating Professional Nursing Practice
Credits: 2
Weekly seminar provides an opportunity for the analysis, synthesis, refinement and integration of nursing knowledge. Standardized testing provides timely feedback to facilitate transition to professional practice.
Co-requisite: NURS 721C
Equivalent(s): NURS 733
Grade Mode: Letter Grading

NURS 721C - Integrating Professional Nursing Practice Clinical
Credits: 6
Clinical synthesis experience to refine and integrate previously learned knowledge and skills into professional practice through a cooperatively designed learning experience. Students plan, deliver and manage care under the supervision of a licensed preceptor.
Co-requisite: NURS 721
Equivalent(s): NURS 733
Grade Mode: Letter Grading

NURS 730 - Integrated Pediatric and Family Nursing
Credits: 6
The course considers the child within the context of family as the focus for relationship-centered nursing practice. Students are introduced to the care of children from a developmental perspective through an examination of commonly occurring transitions and alterations to health from infancy through adolescence. Students explore professional nursing practice roles in health promotion, illness prevention and care of children with acute and chronic conditions at various developmental stages.
Prerequisite(s): NURS 530 with a minimum grade of D- and NURS 531 with a minimum grade of D- and NURS 532 with a minimum grade of D- and NURS 534 with a minimum grade of D- and NURS 630 with a minimum grade of D- and NURS 631 with a minimum grade of D- and NURS 632 with a minimum grade of D- and NURS 633 with a minimum grade of D-.
Equivalent(s): NURS 702, NURS 702C
Grade Mode: Letter Grading
Special Fee: Yes

NURS 732W - Nursing Leadership within Healthcare Sysems
Credits: 4
This course prepares nursing students to lead within complex healthcare systems. Students explore leadership theories, organizational structures, healthcare delivery models, and policy/financial influences on care. Emphasis is placed on safety, interprofessional communication, team dynamics, and professional identity. This course promotes critical thinking, ethical decision-making, and the development of a personal leadership style that fosters health equity and enhances quality outcomes.
Attributes: Writing Intensive Course
Prerequisite(s): NURS 530 with a minimum grade of D- and NURS 531 with a minimum grade of D- and NURS 532 with a minimum grade of D- and NURS 534 with a minimum grade of D- and NURS 630 with a minimum grade of D- and NURS 631 with a minimum grade of D- and NURS 632 with a minimum grade of D- and NURS 633 with a minimum grade of D-.
Equivalent(s): NURS 627
Grade Mode: Letter Grading

NURS 733 - Transition to Professional Nursing Practice
Credits: 8
This capstone course prepares pre-licensure nursing students for the transition from student to professional nurse. Through a combination of didactic instruction, high-fidelity simulation, and immersive clinical experiences, students will integrate and apply knowledge, skills, and professional values essential for safe, effective, and person-centered care. Students will engage in reflective practice, demonstrate accountability, and collaborate with interprofessional teams to manage complex patient care across diverse settings. Simulation and clinical practicum experiences are designed to enhance readiness for entry-level practice and licensure, with a focus on prioritization, delegation, communication, and evidence-based decision-making.
Prerequisite(s): NURS 530 with a minimum grade of D- and NURS 531 with a minimum grade of D- and NURS 532 with a minimum grade of D- and NURS 534 with a minimum grade of D- and NURS 630 with a minimum grade of D- and NURS 631 with a minimum grade of D- and NURS 632 with a minimum grade of D- and NURS 633 with a minimum grade of D-.
Equivalent(s): NURS 721, NURS 721C
Grade Mode: Letter Grading
Special Fee: Yes

NURS 734 - Perspectives in Population Health Nursing
Credits: 6
This course prepares nursing students for population-focused practice by integrating principles from nursing theory and public health sciences to promote equitable health outcomes across diverse communities. Students will develop competencies in community assessment, health promotion, illness prevention, and evidence-based practice, with a focus on identifying and analyzing health risks. The course emphasizes the impact of Social Drivers of Health and guides students in designing sustainable, culturally responsive interventions in collaboration with community stakeholders. Additionally, students will explore the role of health policy and advocacy in addressing public health and environmental challenges across the lifespan.
Prerequisite(s): NURS 530 with a minimum grade of D- and NURS 531 with a minimum grade of D- and NURS 532 with a minimum grade of D- and NURS 534 with a minimum grade of D- and NURS 630 with a minimum grade of D- and NURS 631 with a minimum grade of D- and NURS 632 with a minimum grade of D- and NURS 633 with a minimum grade of D-.
Equivalent(s): NURS 704, NURS 704P
Grade Mode: Letter Grading
Special Fee: Yes

NURS 748W - Nursing Honors Thesis I
Credits: 1
Honors seminar designed to expand the knowledge and skills presented in previous honors in major courses. Focuses on a project relevant to the discipline of nursing under the direction of a faculty adviser. Open to honors-in-major and senior nursing majors.
Attributes: Honors course; Writing Intensive Course
Prerequisite(s): NURS 648W with a minimum grade of D-.
Equivalent(s): NURS 797
Grade Mode: Letter Grading

NURS 749W - Nursing Honors Thesis II
Credits: 4
Honors seminar designed to expand the knowledge and skills presented in previous honors in major courses. Focuses on a project relevant to the discipline of nursing under the direction of a faculty adviser. Open to honors-in-major and senior nursing majors.
Attributes: Honors course; Writing Intensive Course
Prerequisite(s): NURS 648W with a minimum grade of D- and NURS 748W with a minimum grade of D-.
Equivalent(s): NURS 797
Grade Mode: Letter Grading

NURS 794 - Special Topics
Credits: 0-4
Specialized courses covering information not normally presented in regular course offerings. Description of topics varies. May be repeated but not in duplicate areas of content. Special fee on some sections.
Grade Mode: Letter Grading

NURS 794W - Special Topics
Credits: 1-4
Specialized courses covering information not normally presented in regular course offerings. Description of topics varies. May be repeated but not in duplicate areas of content. Special fee on some sections.
Attributes: Writing Intensive Course
Equivalent(s): NURS 794
Grade Mode: Letter Grading
Special Fee: Yes

Nutrition (NUTR)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

NUTR 400 - Nutrition in Health and Well Being
Credits: 0 or 4
Addresses scientific principles of human nutrition to promote health and well-being. Overview of the biological significance of food and nutrition, specific nutrient functions, and how the supply and demand of food impacts physical health and well-being. Emphasis on scientific literacy and an appreciation of the ways in which we gain scientific knowledge and understanding. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course
Equivalent(s): ANSC 400, NUTR 400H, NUTR 475
Grade Mode: Letter Grading
Special Fee: Yes

NUTR 401 - Professional Perspectives on Nutrition
Credits: 1
Examines the many opportunities for dietitians and nutrition science professionals, from farm to fork, to health and nutrition outcomes. Students meet and interact with faculty and explore career paths and nutrition strategies in the food and nutrition science fields. Legal and ethical considerations for these professionals are discussed. Content areas for specialization in nutritional sciences, dietetics, health and wellness are reviewed, as well as the Ecogastronomy dual major.
Grade Mode: Credit/Fail Grading

NUTR 403 - Culinary Arts Skills Development
Credits: 4
This laboratory class explores classical culinary and basic cooking techniques. Classical recipes for stocks, mother sauces, soups and pie crust, quick and yeast breads are featured with hands-on experiential learning using common practices and techniques of the food service industry. Students will gain an understanding of basic ingredients, fabrication, storage, cooking, hygiene and sanitation, equipment usage in modern culinary through demonstration, practice and evaluation.
Equivalent(s): CAN 403
Grade Mode: Letter Grading
Special Fee: Yes

NUTR 405 - Food and Society
Credits: 4
Consideration of the cultural significance of food, emphasizing historical, psychological, social, political, and economic aspects. (Spring semester only.)
Attributes: Social Science (Discovery)
Equivalent(s): ANSC 405, NUTR 405W
Grade Mode: Letter Grading

NUTR 476 - Nutritional Assessment
Credits: 4
Designed for the student who plans to enter the health care profession. Introduces the concepts of nutritional assessment and the practical application of these concepts in the nutritional care of clients in clinical, community, and research settings.
Prerequisite(s): NUTR 400 with a minimum grade of D-.
Grade Mode: Letter Grading

NUTR 506 - Nutrition and Wellness
Credits: 4
Course assists students in making informed decisions affecting personal and societal wellness. Emphasis on the dimensions of wellness, including the impact of psychological, emotional and physical health, as well as environmental influences that affect behavior.
Prerequisite(s): NUTR 400 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken EXSC 527, KIN 527.
Grade Mode: Letter Grading

NUTR 525 - Food and Culture in Italy
Credits: 4
Students will be introduced to the Italian culture and its traditions, with a special focus on food. Part of the course will involve out-of-class activities and tasting experiences in the city of Ascoli Piceno, Italy. Only open to students studying abroad in the UNH-in-Italy Program.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

NUTR 530 - Critical Analysis in Food Studies
Credits: 4
The course aims to investigate concepts and ideas that are essential to food studies. The philosophical aspects of the course are complemented by the experiential components that emphasize the particularity of the Italian environment. Only open to students studying abroad in the UNH-in-Italy Program.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

NUTR 535 - History of Food in Italy
Credits: 4
Students will examine the history of food in Italy and explore the interconnected sociological, cultural, political and environmental histories. Only open to students studying abroad in the UNH-in-Italy Program.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

NUTR 546 - Nutrition in Exercise and Sports
Credits: 4
Advanced nutritional strategies to optimize health, fitness, and athletic performance. Emphasis is on nutrition before, during, and after exercise for fitness, training, and competitions. Topics include healthy strategies for building muscle and losing body fat, as well as dietary manipulation in an effort to gain a competitive advantage.
Prerequisite(s): NUTR 400 with a minimum grade of D-.
Equivalent(s): NUTR 646
Grade Mode: Letter Grading

NUTR 550 - Food Science: Principle and Practice
Credits: 4
Application of scientific principles associated with the study of foods. Topics include: food composition, food additives and regulations, food safety, food biotechnology, product development and sensory evaluation. Principles of scientific inquiry as food ingredients are manipulated in a kitchen lab environment. Lab.
Prerequisite(s): NUTR 400 with a minimum grade of D- and NUTR 403 with a minimum grade of D- and (CHEM 411 with a minimum grade of D- or CHEM 403 with a minimum grade of D- and CHEM 404 with a minimum grade of D-).
Equivalent(s): NUTR 500, NUTR 501
Grade Mode: Letter Grading
Special Fee: Yes

NUTR 560 - Introduction to Research in Nutrition
Credits: 2
Introduction to research methods in nutritional assessment. Students gain both conceptual knowledge and hands-on experience in a collaborative setting while working with the College Health and Nutrition Assessment Project.
Prerequisite(s): NUTR 400 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

NUTR 595 - Mediterranean Diet and Culture
Credits: 4
Is there a diet that allows one to eat, drink, and still be healthy? While Americans struggle with rising rates of obesity and related health conditions, inhabitants of the Mediterranean region enjoy relatively low rates of heart disease, cancer, and obesity. Offers a unique on-site experience in Ascoli Piceno, Italy to investigate the cultural and scientific importance of the Mediterranean Diet. Students review basic nutrition concepts as well as the history and evolution of the Mediterranean diet. Combining lecture, discussion, and experiential activities, NUTR 595 is offered through the UNH Italy Study Abroad Program during the summer session.
Co-requisite: INCO 589
Grade Mode: Letter Grading

NUTR 600 - Field Experience in Nutrition
Credits: 1-4
Supervised field experience in public and private agencies with planned learning objectives related to clinical and community nutrition and food service management. Students are responsible for their own transportation; faculty member coordinates arrangements with fieldwork sites.
Prerequisite(s): NUTR 400 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 6 credits.
Grade Mode: Credit/Fail Grading

NUTR 610 - Nutrition Education and Counseling
Credits: 4
The principles, methods and materials needed to provide nutrition education and counseling services. Emphasis on motivational interviewing, behavior change and developing skills needed to be an effective nutrition educator and counselor.
Prerequisite(s): NUTR 400 with a minimum grade of D- and NUTR 476 with a minimum grade of D-.
Grade Mode: Letter Grading

NUTR 625 - From Farm to the Italian Table
Credits: 4
Students will gain an appreciation for food production (harvesting, processing), culinary preparation, and tasting. Hands-on experience will be emphasized through field trips and will provide a broad, informed perspective on farming and sustainable agriculture. Only open to students studying abroad in the UNH-in-Italy Program.
Grade Mode: Letter Grading

NUTR 628 - Culinary Nutrition Practicum
Credits: 4
This course builds on basic cooking techniques learned in NUTR 403 with an emphasis on the study and use of whole food ingredients to prepare and critically evaluate healthy recipes/meals. Techniques such as recipe modification and menu development will be addressed. The course culminates with the development of a multi-course menu developed, prepared and presented by the students in the class.
Grade Mode: Letter Grading
Special Fee: Yes

NUTR 650 - Life Cycle Nutrition
Credits: 4
Comprehensive review of the nutritional issues related to the life cycle. Nutrient requirements of each life cycle stage are analyzed in the context of their metabolic functions. Practical application of theory at each stage of the life cycle through projects and discussion. Recommended BMS 507 and BMS 508.
Prerequisite(s): NUTR 400 with a minimum grade of D-.
Grade Mode: Letter Grading

NUTR 686 - UNH-in-Italy Study Abroad
Credits: 0
Provides a unique opportunity to study abroad in Ascoli Piceno, Italy during the semester. Open only to students studying abroad in the UNH-in-Italy Program.
Grade Mode: Not graded
Special Fee: Yes

NUTR 699 - Independent Study
Credits: 1-4
Scholarly project in an area of the nutritional sciences under the guidance of a faculty adviser.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 4 times.
Equivalent(s): NUTR 699W
Grade Mode: Letter Grading

NUTR 700 - Career Development in Dietetics
Credits: 2
Preparation for applying to dietetic internship programs and/or graduate school. Topics include writing resumes and personal statements, interviewing, professional skills, and navigating the online internship application.
Grade Mode: Letter Grading

NUTR 704 - Managerial Skills in Dietetics
Credits: 4
Emphasis on the basic principles of managing in dietetic fields such as clinical, community, and food service operations is the focus of course content. This includes personnel management, in-service and on-the-job training, effective leadership, decision making, assessing employee motivation, productivity and competence, and financial management.
Grade Mode: Letter Grading

NUTR 709 - Nutritional Epidemiology
Credits: 4
This course introduces basic concepts and methods in key areas of nutritional epidemiology, and discusses practical considerations related to designing, analyzing, and evaluating population-based nutrition studies. Research methods used in nutritional epidemiology will be taught to provide students with the ability to critically evaluate the nutritional epidemiological evidence. Learning will be enhanced by practical experiences in the collection, management, and analysis of nutritional epidemiological data during lab and in-class activities.
Prerequisite(s): NUTR 400 with a minimum grade of D- and (PSYC 402 with a minimum grade of D- or SOC 502 with a minimum grade of D- or BIOL 528 with a minimum grade of D-).
Grade Mode: Letter Grading

NUTR 710 - Advanced Diabetes Care
Credits: 2
Advanced Diabetes Care is a 2-credit course designed to build on foundational knowledge of diabetes care and education. During the semester, students will explore the pathophysiology of diabetes as well as modern medications and technology used to improve blood sugar management. Students will apply their knowledge of diabetes and nutrition to interpret data and deliver effective, compassionate care.
Prerequisite(s): NUTR 400 with a minimum grade of D- and BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

NUTR 715 - Advanced Sports Nutrition
Credits: 4
The focus of the course is placed on the application of evidence-based knowledge to sport-specific scenarios. Insight and skills gained in this course will expand students' abilities in assisting and recommending proper nutritional strategies for athletes during training and competition. Additionally, this discusses strategies to combat common issues athletes may encounter, such as injuries, illness, eating disorders, and gastrointestinal discomfort.
Prerequisite(s): NUTR 546 with a minimum grade of D-.
Grade Mode: Letter Grading

NUTR 720 - Community Nutrition
Credits: 4
Identification of causes of complex public health nutrition problems (such as food insecurity and escalating obesity rates) and cost-effective community-based interventions required to solve them. Provides skills and tools needed to assess design, and evaluate community nutrition and wellness interventions.
Attributes: Writing Intensive Course
Prerequisite(s): NUTR 400 with a minimum grade of D-.
Equivalent(s): ANSC 610, ANSC 720
Grade Mode: Letter Grading

NUTR 730 - From Seed to Sea: Examining Sustainable Food Systems
Credits: 4
Integration of diverse human and natural system interactions in a seminar-based course to understand issues in food system sustainability. Examination of food system structure and function from coupled human and natural systems perspectives. Current and topical issues of food and agriculture include: exploration of using natural resources to meeting growing population demands; conflicting views on meeting food and nutrition requirements; impacts of increased stress on natural resources; inequities and discrimination in the food system; impact on dietary guidelines on the environment.
Prerequisite(s): NUTR 400 with a minimum grade of D- or NUTR 405 with a minimum grade of D-.
Grade Mode: Letter Grading

NUTR 740 - Nutrition for Children with Special Needs
Credits: 4
Nutritional assessment and care of children with special needs resulting in feeding difficulties requiring medical nutrition therapy.
Prerequisite(s): NUTR 400 with a minimum grade of D-.
Grade Mode: Letter Grading

NUTR 750 - Nutritional Biochemistry
Credits: 4
Digestion, absorption, transport, and utilization of food nutrients. Role of macro- and micro-nutrients as substrates and catalysts for metabolic pathways, and the role of these pathways in maintaining human health at the cellular, organ, and whole body levels.
Attributes: Writing Intensive Course
Prerequisite(s): (BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-) or (ANSC 511 with a minimum grade of D- and ANSC 512 with a minimum grade of D-) and BMCB 658 with a minimum grade of D-.
Grade Mode: Letter Grading

NUTR 751 - Nutritional Biochemistry of Micronutrients
Credits: 4
Investigation of the nutritional and biochemical aspects of micronutrient metabolism. All essential vitamins and minerals, as well as some phytonutrients and quasi-nutrients, are explored in depth. Nutrients are examined for their molecular, cellular, metabolic and biomedical functions, as well as the biochemical and clinical consequences of their deficiency or excess.
Prerequisite(s): NUTR 750 with a minimum grade of D-.
Grade Mode: Letter Grading

NUTR 755 - Concepts and Controversies in Weight Management
Credits: 3
Overview of the risk factors associated with obesity; evidence-based recommendations for assessment and treatment of obesity. Counseling skills important to successful weight management and non-diet approaches are also explored.
Co-requisite: NUTR 758
Prerequisite(s): NUTR 400 with a minimum grade of D- and NUTR 476 with a minimum grade of D- and NUTR 610 with a minimum grade of D-.
Equivalent(s): NUTR 756
Grade Mode: Letter Grading

NUTR 758 - Practicum in Nutrition and Wellness
Credits: 2
Assist clients in making lifestyle and dietary changes over a 10-week period and develop skills in marketing, advertising, counseling, an oral communication related to weight management.
Co-requisite: NUTR 755
Prerequisite(s): NUTR 400 with a minimum grade of D- and NUTR 476 with a minimum grade of D- and NUTR 610 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): NUTR 680
Grade Mode: Letter Grading

NUTR 773 - Clinical Nutrition
Credits: 4
Principles and mechanisms of disease that result in altered nutrient requirements in humans.
Prerequisite(s): NUTR 400 with a minimum grade of D- and BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-.
Equivalent(s): ANSC 773, ANSC 774, NUTR 774
Grade Mode: Letter Grading

NUTR 775 - Practical Applications in Medical Nutrition Therapy
Credits: 4
Combination of lecture and supervised practical experience in medical nutrition therapy in a New England hospital. Emphasizes nutritional counseling, assessment, and instruction of patients with nutrition-related disorders.
Prerequisite(s): NUTR 476 with a minimum grade of D- and ((BMS 507 with a minimum grade of D- and BMS 508 with a minimum grade of D-) or (ANSC 511 with a minimum grade of D- and ANSC 512 with a minimum grade of D-)) and (BMCB 658 with a minimum grade of D- or BMCB 658A with a minimum grade of D-).
Equivalent(s): ANSC 775
Grade Mode: Letter Grading
Special Fee: Yes

NUTR 780 - Critical Issues in Nutrition
Credits: 4
Critical review and analysis of controversial topics in nutrition; emphasis on developing oral and written communication skills and critical thinking skills.
Attributes: Writing Intensive Course
Prerequisite(s): NUTR 773 with a minimum grade of D-.
Equivalent(s): ANSC 780
Grade Mode: Letter Grading

NUTR 790 - Undergraduate Teaching Experience
Credits: 1-2
Assist graduate teaching assistants or faculty in preparing, presenting, and executing NUTR courses/laboratories.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

NUTR 795 - Investigations
Credits: 1-4
Scholarly research project in an area of the nutritional sciences under the guidance of a faculty adviser.
Equivalent(s): NUTR 795W
Grade Mode: Letter Grading

NUTR 795W - Investigations
Credits: 1-4
Scholarly research project in an area of the nutritional sciences under the guidance of a faculty adviser.
Attributes: Writing Intensive Course
Equivalent(s): NUTR 795
Grade Mode: Letter Grading

NUTR 799H - Honors Senior Thesis
Credits: 1-4
A special project conducted under faculty supervision and resulting in a written honors thesis. Students must initiate discussion of the project with an appropriate faculty member.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 1 time.
Grade Mode: Letter Grading

Occupational Therapy (OT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

OT 444 - Living and Doing with Technology
Credits: 4
This course draws upon the knowledge from emerging product design concepts and principals and advocates for inclusiveness of all consumers regardless of their age, abilities, disabilities, and personal affinities. Students will apply critical thinking and hands-on learning to evaluate day-to-day technologies by use of various design criteria, identify usability problems, and design technology solutions. Course work will include readings, interactive activities, discussions, quizzes, and group projects.
Attributes: Environment,TechSociety(Disc); Inquiry (Discovery)
Grade Mode: Letter Grading

OT 500 - Behavior and Development of Children
Credits: 4
Introduces the biological, psychosocial, and cultural aspects of human development from birth through adolescence. Emphasizes theories that help explain human behavior; discusses implications of developmental research.
Grade Mode: Letter Grading

OT 501 - Developmental Tasks of Adulthood
Credits: 4
Includes the biological and psychosocial context of development for adults. Developmental tasks relate to the accomplishment of prior tasks, physiological change, socioeconomic status, and psychosocial development.
Grade Mode: Letter Grading

OT 510 - Exploring Occupational Therapy and Occupation
Credits: 4
Occupational therapy is introduced as a human service profession through experiential and academic activities, which illustrate the personal and professional skills required to practice in a variety of settings and roles. Basic concepts of human occupation and the therapeutic use of occupation are explored. Comparisons are made to related human service careers. Students are encouraged to do a personal assessment of their interest and potential for further study of occupational therapy.
Grade Mode: Letter Grading

OT 513 - Stressed Out: The Science and Nature of Human Stress
Credits: 0 or 4
The human stress response system, research investigating the sequelae of stress on health, protective strategies for stress, managing personal stress effectively, and strategizing stress modulation as an intervention technique. Course format includes two hours of weekly lecture/discussion followed by one hour of experiential laboratory in which students research and/or apply new information.
Attributes: Biological Science(Discovery); Discovery Lab Course
Grade Mode: Letter Grading
Special Fee: Yes

OT 520 - Happy and Healthy at Work: Promoting Wellness, Diversity and Inclusion
Credits: 4
Offers improved understanding and ability to effectively manage a diverse and healthy workforce. Addresses key diversity, inclusion, and wellness issues int he workplace of a general, technical, and social nature with an emphasis on disability and health promotion.
Attributes: Social Science (Discovery); Inquiry (Discovery)
Equivalent(s): HMGT 520, HMGT 598, OT 598
Grade Mode: Letter Grading
Special Fee: Yes

OT 595 - Special Topics
Credits: 4
Coursework on selected topics or special interest subjects that would not normally be covered by other courses in the curriculum.
Grade Mode: Letter Grading
Special Fee: Yes

OT 610 - Occupation, Identity, Disability
Credits: 4
Students develop skills and knowledge for analyzing daily existence, patterns of activity and the occupational choices pursued by humans. Students explore how the self-identity of individuals with and without disability is influenced by participation in everyday activities, and contextual factors: Through reading, reflective writing and collecting personal narratives of individuals with disability, students examine the relations among engagement in daily occupations and the orchestration of routines and social participation with self identity and well-being.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

OT 620 - Medical Terminology
Credits: 2
This course provides an introduction to medical terminology. The origin, roots, prefixes and suffixes of common scientific and medical terms will be examined as well as common abbreviations and terms used in medical records documentation and within the medical, and allied health literature. Content is appropriate for students majoring in the Biological Sciences, Medical Sciences and Allied Health fields.
Equivalent(s): OT 720
Grade Mode: Letter Grading

OT 685 - Psychosocial Disorders and Everyday Life
Credits: 4
The study of abnormal behavior in the context of its effect on everyday function. Provides background information on adult psychosocial disorders commonly seen by service providers in the mental health system. Students learn to observe and describe behavior in terms of functional impairment, diagnostic criteria, and causative factors. General psychosocial and biological treatments are studied. This course or its equivalent is a prerequisite for entry to the professional master's degree program in occupational therapy. Students are expected to bring to this course a basic knowledge of psychosocial aspects of human development.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Grade Mode: Letter Grading

OT 695 - Independent Study
Credits: 2-4
In-depth study with faculty supervision.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

OT 710 - OT Practice and Professional Roles
Credits: 3
Students are introduced to foundation knowledge, values and philosophy of occupational therapy practice. Students learn skills to apply professional behaviors and skills required to be ethical practitioners. They learn about various practice settings and systems within which occupational therapists practice to prepare them to begin to make decisions regarding their fieldwork site selections. They are introduced to models of OT practice.
Grade Mode: Letter Grading
Special Fee: Yes

OT 715 - Introduction to Group Process: Theory and Application
Credits: 2
This course provides a theoretical foundation of group process in occupational therapy practice across practice settings. It explores several group theory perspectives and applies them to OT practice considering multiple group models, group leadership concepts, group process, therapeutic use of self, and contexts/environments. Students will learn to articulate core principles of group process and identify the role of occupational therapy practitioners in using groups as an intervention method and/or service delivery model.
Grade Mode: Letter Grading

OT 730 - Assistive Technology for Enhancing Occupational Performance
Credits: 3
This course provides instruction on how occupational therapy practitioners use and apply assistive technology in the context of client evaluation and intervention, to improve quality of life and functional capacities. Students learn and apply clinical reasoning skills related to the selection, procurement, modification and training in the use of assistive technology solutions. OT majors only.
Co-requisite: OT 730L
Grade Mode: Letter Grading

OT 730L - Assistive Technology for Enhancing Occupational Performance Lab
Credits: 1
Co-Requisite Laboratory for OT 730 and OT 830 Assistive Technology for Enhancing Occupational Performance. Students are provided hands-on learning experiences regarding the fabrication, identification, adaptation and training in the use of assistive technology for individuals with functional problems associated with disability or impairment. OT evaluation and interventions related to the application of assistive technology are addressed. OT majors only.
Co-requisite: OT 730
Grade Mode: Credit/Fail Grading
Special Fee: Yes

OT 731 - Introduction to Assistive Technology Principles
Credits: 2
This course presents an overview of the various assistive technology service delivery models, assessment tools, legislation, funding, and assistive technology across the lifespan.
Grade Mode: Letter Grading

OT 733 - Assistive Technology for Physical Access I: Electronic Technologies
Credits: 2
This course focuses on switch and computer access solutions; programming switch interfaces for computers and iPads; alternative mice and keyboards; switch access recipes; iPad mounting solutions; electronic aids for daily living, voice controlled solutions for the phone, computer, and activation of household appliances. Students will learn how to make, modify, and mount various switches an electronic devices. Intensive hands-on AT exploration will be completed on campus or virtual evidence provided will be accepted.
Grade Mode: Letter Grading

OT 734 - Assistive Technology for Physical Access II: Mobility, Seating, and Transportation
Credits: 2
This course focuses on assistive technology solutions to maximize independence at home, in the community, and on the job for individuals who experience physical disabilities. Students will acquire skills in conducting accessibility assessments, Topics explored include wheelchair seating and mobility; ergonomic hand tools, independent living aids; ramps and lifts; vehicle modifications; and modifications for canes, crutches, walkers, and wheelchairs. Intensive hands-on AT exploration will be completed on campus or virtual evidence provided will be accepted.
Grade Mode: Letter Grading

OT 735 - Assistive Technology for Communication and Cognition
Credits: 2
This course focuses on alternative and augmentative communication devices and devices that benefit individuals who experience cognitive impairments. This course explores assistive technology solutions for note taking, devices and apps for self-regulation, organization, and reminders. Students will learn how to conduct cognitive demand analysis for devices and apps to help users select appropriate accommodations and assistive technology solutions. Intensive hands-on AT exploration will be competed on campus or virtual evidence provided will be accepted.
Grade Mode: Letter Grading

OT 736 - Assistive Technology for Vision and Hearing
Credits: 2
This course focuses on assistive technology for blind and low vision; deaf and hard of hearing; and deaf/blindness. Students will use an assortment of magnification devices; amplification systems; and assistive listening devices as well as learn how to create a variety of approaches to accommodate for vision and hearing impairments. Intensive hands-on AT exploration will be completed on campus or virtual evidence provided will be accepted.
Grade Mode: Letter Grading

OT 741 - Human Occupation
Credits: 4
This course introduces students to the broad concept of occupation by exploring ways people acquire skills for occupational performance. Students develop an understanding of the relations between health and occupation, disability and occupation, and explore how humans find meaning in their lives through occupational engagement.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

OT 744 - Fieldwork and Professionalism - Level 1
Credits: 1
This course prepares students to enter level 1 fieldwork with confidence and working knowledge of expectations for a full-time two-week level 1 fieldwork experience.
Grade Mode: Credit/Fail Grading
Special Fee: Yes

OT 745 - Administration and Management for Occupational Therapy Practice
Credits: 4
This course aims to increase the student's understanding of systems of practice, and to business fundamentals associated with occupational therapy service delivery. Specific topics covered include and analysis of practice settings, reimbursement, supervision of professional and non-professional staff, program evaluation methods, ethics, OT management practices, marketing, health policy including medicare, Human Rights and Education Legislation, and the impact of policy decisions for the delivery of OT services. OT majors only.
Grade Mode: Letter Grading

OT 746 - Fieldwork & Prof Level II
Credits: 1
This course is designed to deepen understanding of professionalism needed for success on Level II fieldwork. We will explore role changes that accompany leaving the academic world and entering the larger realm of professional practice. Students analyze factors that contribute to successful professional development and ethical practice. Students use the results of their analyses to plan their individual transition to fieldwork and entry-level practice.
Prerequisite(s): OT 744 with a minimum grade of D- and OT 792 with a minimum grade of D-.
Grade Mode: Letter Grading

OT 750 - Neuro-Occupation: The Relationship Between Occupation and the Brain
Credits: 3
The course explores brain development, neuroplasticity and occupation across the lifespan. Following a contextual review of the neuroanatomy and physiology, the students will explore the mind-body relationship across multiple domains of occupational therapy practice. There are four primary content areas: Applied neurology, nature with nurture: occupational engagement and the development of the brain, the brain, occupation and behavior, and neuroplasticity as the basis for improving motor behavior.
Prerequisite(s): OT 500 with a minimum grade of D- and OT 501 with a minimum grade of D- and KIN 707 with a minimum grade of D- and PSYC 401 with a minimum grade of D-.
Grade Mode: Letter Grading

OT 751 - Mind Body Systems/Neurologically Based Function and Dysfunction
Credits: 3
This course applies an occupational science perspective to study disease, illness, medical conditions, and impairments to human body structures and functions across the lifespan. A self-directed method is used to examine the perceptual, cognitive, biopsychosocial basis of these disorders. A basic overview of human mind-body systems is provided with an emphasis on pathology, the recognition of symptoms, their causes and the occupational implications of the disorders. The emphasis is on how disease and impairments in body systems, and physical and mental functioning interact with the human condition, the uniqueness of individuals, social determinants of health (SDOH), and the environments within which people live to impact occupational performance, one's overall health, well-being, and life quality.
Grade Mode: Letter Grading

OT 752 - Human Movement and Environmental Effects on Everyday Occupations
Credits: 3
Integrates the student's prerequisite knowledge of occupation. Develops skills required for interpretation of biomechanical analysis for creating successful occupational performance for individuals with varied musculoskeletal, cardiac and respiratory dysfunction. Integration of the occupational therapy clinical reasoning process and the use of occupations as a therapeutic mechanism for change are emphasized. The analysis of environment as it relates to human movement and participation in desired occupations is explored.
Co-requisite: OT 752L
Grade Mode: Letter Grading
Special Fee: Yes

OT 752L - Human Movement Lab
Credits: 1
Human Movement Lab.
Co-requisite: OT 752
Grade Mode: Credit/Fail Grading
Special Fee: Yes

OT 760 - Psychosocial Evaluation and Intervention
Credits: 3
Examines the evaluation of psychosocial and psycho-emotional areas of occupational performance and the planning and implementation of occupation-based interventions across domains of practice and client populations. Course addresses developing a client's occupational profile, narrative reasoning and therapeutic use of self, behavioral change, illness representation, and adjustment to chronic disorders. A specific focus of the course is evaluation of and intervention for clients' presenting with mental health disorders. Open to OT majors only.
Co-requisite: OT 760L, OT 760R
Grade Mode: Letter Grading

OT 760L - Psychosocial Evaluation and Intervention Lab
Credits: 1
This is the co-requisite lab for OT 760. Lab provides hands-on experiences regarding the evaluation and intervention of psychological and psycho-emotional areas of occupational performance. Course focuses on the evaluation and intervention for clients presenting with mental health disorders and also addresses narrative reasoning, therapeutic use of self, behavioral change, illness representation and adjustment to chronic disorders.
Co-requisite: OT 760
Grade Mode: Credit/Fail Grading
Special Fee: Yes

OT 760R - Psychosocial Evaluation & Intervention Recitation
Credits: 0
Psychosocial Evaluation and Intervention Recitation provides additional hands-on and experiential learning opportunities in an established community program for all students enrolled in OT 760. This recitation allows students the opportunity to develop the skills needed to work in mental/behavioral health settings.
Co-requisite: OT 760
Grade Mode: Credit/Fail Grading

OT 762 - Occupational Therapy Evaluation and Intervention for Children
Credits: 3
In this course, students will develop entry-level practice skills for conducting occupational therapy (OT) evaluations and interventions for children. Organized around the OT Practice Framework, students will learn how to collaborate with families and other professionals, develop clinical observation skills, and learn frequently used standardized assessments. Additionally, students will use primary OT frames of reference to plan and implement interventions. Students will apply their understanding of typical and atypical child development, and extend their clinical reasoning skills in order to develop competencies for providing OT services for children and with a variety of conditions across common practice settings.
Co-requisite: OT 762L, OT 762R
Grade Mode: Letter Grading
Special Fee: Yes

OT 762L - Occupational Therapy Evaluation and Intervention for Children Lab
Credits: 1
The co-requisite labs provide hands-on experiences to compliment lecture material from OT 762, and to provide opportunities for the practical application of knowledge.
Co-requisite: OT 762
Grade Mode: Credit/Fail Grading
Special Fee: Yes

OT 762R - Occupational Therapy Evaluation and Intervention for Children Recitation
Credits: 0
The recitation provides hands-on experiences to compliment lecture material from OT 762 and OT 762L, and to provide opportunities for the practical application of knowledge.
Grade Mode: Credit/Fail Grading

OT 763 - Occupational Therapy Evaluation and Intervention for Adults
Credits: 3
Students will develop entry-level practice skills related to the synthesis of evaluation, intervention planning and goal writing. The student will be introduced to a variety of standardized evaluation tools and implement OT interventions within various contexts of practice through case studies. Specific intervention techniques based on accepted frames of reference and research evidence that helps clients engage successfully in the daily occupations will be emphasized.
Co-requisite: OT 763L
Prerequisite(s): OT 751 with a minimum grade of B-.
Grade Mode: Letter Grading
Special Fee: Yes

OT 763L - Occupational Therapy Evaluation and Intervention for Adults Lab
Credits: 1
This lab is a co-requisite course to accompany OT 763 Occupational Therapy Evaluation and Intervention for Adult Dysfunction. The lab course provides opportunity for the students to engage in experiential learning and application of principles and techniques learned in the lecture course.
Co-requisite: OT 763
Grade Mode: Credit/Fail Grading

OT 763R - Occupational Therapy Evaluation and Intervention for Adults Recitation
Credits: 0
The recitation provides hands-on experiences to compliment lecture material from OT 763 and OT 763L, and to provide opportunities for the practical application of knowledge.
Co-requisite: OT 763, OT 763L
Grade Mode: Credit/Fail Grading

OT 771 - Enabling Participation in Community Groups
Credits: 2
Students will learn about a community organization partnership, the people served by the organization, and principles of conducting therapeutic groups within the organization. Emphasis of content includes group process, clinical documentation, intervention planning and OT services with adults with cognitive impairments.
Co-requisite: OT 771L
Grade Mode: Letter Grading
Special Fee: Yes

OT 771L - Enabling Participation in Community Groups Lab
Credits: 2
Students will work in an organization, learn about the people served by this organization and conduct therapeutic groups. This lab serves as a Level I Fieldwork placement.
Co-requisite: OT 771
Grade Mode: Credit/Fail Grading
Special Fee: Yes

OT 781 - Introduction to Research and Evidence-Based Practice
Credits: 3
This course introduces students to basic principles of scientific inquiry that contribute to OT evaluation and intervention evidence base. Students will explore quantitative, qualitative and mixed research methods and will learn the fundamental steps in conducting research such as formulating research questions and identifying appropriate research designs, instruments for measurement and outcomes. Students will have hands-on experience in identifying a research topic, reviewing the literature, retrieving, reading and synthesizing research articles. Prereq: Statistics.
Prerequisite(s): HHS 540 with a minimum grade of D- or PSYC 402 with a minimum grade of D- or SOC 402 with a minimum grade of D-.
Grade Mode: Letter Grading

OT 782 - Research Methods and Application
Credits: 3
The course provides students an in depth understanding of quantitative, qualitative, and mixed methods designs. The students will learn the necessary knowledge and skills required to critically appraise research evidence. Emphasis will be given to various analytical approaches used to examine qualitative/quantitative evidence, such as understanding differences between experimental and quasi-experimental study designs. Students will work in teams to identify a research topic, review and appraise pertinent evidence, identify and describe gaps in existing knowledge. Students will further use this information to develop a research proposal that addresses the identified gaps.
Prerequisite(s): OT 781 with a minimum grade of D-.
Grade Mode: Letter Grading

OT 789 - Using iPads to Support Children with Disabilities
Credits: 3
The iPad is changing the way we teach and learn. This technology embraces Universal design principles (UDL) and enables children with significant disabilities to learn in ways never thought possible five years ago. It is a tool for delivering multimedia content and embraces the use of Multi modal learning. This technology finally levels the playing field to support all students including students with disabilities.
Grade Mode: Letter Grading

OT 791 - Senior Honors Thesis
Credits: 1-4
Completion of a research project relevant to the study of occupation or occupational therapy, under the direction of a faculty mentor. Dissemination of findings is expected, as a written thesis paper and an oral presentation. This course is required for graduation with departmental honors in the occupational therapy major. A multiple-semester sequence of 1-4 credits is permitted.
Attributes: Honors course
Prerequisite(s): OT 781 with a minimum grade of D- and OT 782 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

OT 792 - Level I Fieldwork
Credits: 1
Provides occupational therapy students an opportunity to experience occupational therapy in a clinical setting. Students attend a seminar prior to beginning their placement. The Level I placement is scheduled between the fall and spring semesters of the senior year. During fieldwork, students observe an occupational therapist as well as participate in the planning and implementing of the occupational therapy assessment or intervention process for a client.
Grade Mode: Credit/Fail Grading

OT 795 - Special Topics
Credits: 1-4
Formal courses given on selected topics or special interest subjects. Work may be directed in one of the following areas: A) Administration; B) Clinical Education; C) Pediatrics; D) Physical Disabilities; E) Mental Health; F) Gerontology/Geriatrics; G) School-based Practice, and others.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading
Special Fee: Yes

Ocean Engineering (OE)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

OE 400 - Ocean Engineering Seminar
Credits: 1
A seminar based course considering contemporary topics involved in ocean exploration. Faculty and guest speakers will describe thematic ocean engineering subareas through weekly presentations. The presentations will provide examples of engineering applications and ocean exploration. Class participation credit can be earned through oral discussions, presentation of contemporary OE topics, or hands on projects.
Repeat Rule: May be repeated for a maximum of 2 credits.
Grade Mode: Credit/Fail Grading

OE 401 - Ocean Engineering Seminar
Credits: 1
A seminar based course considering contemporary topics involved in ocean exploration. Faculty and guest speakers will describe thematic ocean engineering subareas through weekly presentations. The presentations will provide examples of engineering applications and ocean exploration. Class participation credit can be earned through oral discussions, presentation of contemporary OE topics, or hands on projects.
Repeat Rule: May be repeated for a maximum of 2 credits.
Grade Mode: Credit/Fail Grading

OE 490 - Introduction to Ocean Engineering
Credits: 4
Survey of engineering applications in the ocean environment. Topics vary an include hydrodynamics, waves, tides, underwater sound, instrumentation, marine geomechanics, and naval architecture. Includes guest lectures by faculty members from the Engineering departments.
Co-requisite: PHYS 407
Grade Mode: Letter Grading

OE 610 - Ocean Instrumentation Lab
Credits: 4
An investigation of the discrete and integrated electronics typically used in the design and implementation of ocean instruments. Topics include both passive and active analog electronic elements typically used for signal conditioning of common oceanographic sensors (e.g., thermistors, pressure sensors, acoustic transducers); A/D and D/A conversion, sensor sampling criteria and rules, with examples from contemporary ocean instruments; embedded micro-controller/microcomputer modules for autonomous or remote sensing in ocean environments; inter-instrument communications methods typically used in ocean instruments (e.g., serial and network communications). Laboratory time will be used to develop practical experience in specification, design, development and testing of various ocean instrument components based on the material presented.
Prerequisite(s): MATH 527 with a minimum grade of D- and MATH 528 with a minimum grade of D- and ECE 537 with a minimum grade of D- and IAM 550 with a minimum grade of D-.
Grade Mode: Letter Grading

OE 677 - Seamanship and Marine Weather for Ocean Engineers and Scientists
Credits: 2
A survey of basic principles of seamanship and marine weather intended for ocean engineers and ocean scientists. Reviews ship and vessel nomenclature, shipboard safety, techniques for equipment handling and instrument deployment, common shipboard evolutions associated with scientific cruises, navigation principles, and marine weather phenomena and products. Includes field trips and practical applications.
Grade Mode: Credit/Fail Grading

OE 717 - Marine Robotics and Applications
Credits: 3
The purpose of this course is to cover (in lecture and lab format) the broad spectrum of marine vehicles and applications , as well as what is involved in designing and building robotic vehicles for specific missions. Course topics include: marine applications, sensors for marine environments, vehicle subsystems, ocean and open water environment, dynamic modeling and control, and design/fabrication/testing. Various invited speakers (both scientists and engineers) provide learning modules on various marine robotic related topics.
Co-requisite: ME 670
Equivalent(s): ME 717
Grade Mode: Letter Grading

OE 720 - Design of Recirculating Aquaculture Systems
Credits: 3
The purpose of this course is to provide a practical engineering approach to the design of land-based, recirculating aquaculture systems. The course includes an introductory background on the state of our global seafood industries and the need for sustainable production approaches in fresh, brackish, and saltwater environments with various types of systems presently in use. With a focus on recirculating aquaculture systems, this course will include topics such as environmental chemistry and water quality, stoichiometric analyses, nitrification, the potential of hydrogen, temperature, dissolved oxygen, carbon dioxide, the carbonate cycle and alkalinity. A systems design approach will then be covered to include developing plans for assessing biomass growth, system oxygen consumption and total nitrogen and carbon dioxide production. System design will consider processes associated with tank hydrodynamics, waste settling, solids removal, biofiltration, UV treatment, temperature control, aeration, degassing, pumps, and piping systems. Mass balance approaches through control volumes will be examined. A hands-on, student led system design project will be required and examined using engineering economic principles such as the time value of money, inflation, taxes, and internal rates of return. Use of computer tools will be necessary.
Prerequisite(s): (MATH 426 with a minimum grade of D- or MATH 424B with a minimum grade of D-) and (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D- or (PHYS 401 with a minimum grade of D- and PHYS 402 with a minimum grade of D-)) and (CHEM 405 with a minimum grade of D- or (CHEM 403 with a minimum grade of D- and CHEM 404 with a minimum grade of D-)).
Grade Mode: Letter Grading

OE 753 - Ocean Hydrodynamics
Credits: 3
Fundamental concepts of fluid mechanics as applied to the ocean, continuity, Euler and Navier-Stokes equations, Bernoulli equation, stream function, potential function, moment theorem, turbulence and boundary layers are developed with ocean applications.
Prerequisite(s): MATH 527 with a minimum grade of D- and (CEE 650 with a minimum grade of D- or ME 608 with a minimum grade of D-).
Grade Mode: Letter Grading

OE 754 - Ocean Waves and Tides
Credits: 4
Small amplitude, linear wave theory, standing and propagating waves, wave energy, refraction, diffraction, transformation in shallow water, statistics of random seas, spectral energy density, generating eave time series using the random phase methods forces on structures, Froude scaling of wave tank experiments, nonlinear effects. Description of tides as long waves, equilibrium tide, mathematical modeling including friction, nonlinear effects, and Coriolis forces, tidal analysis, the Great Bay Estuarine System as a case study.
Prerequisite(s): (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-) and MATH 527 with a minimum grade of D- and MATH 528 with a minimum grade of D-.
Grade Mode: Letter Grading

OE 757 - Coastal Engineering and Processes
Credits: 3
Introduces small amplitude and finite amplitude wave theories. Wave forecasting by significant wave method and wave spectrum method. Coastal processes and shoreline protection. Wave forces and wave structure interaction. Introduction to mathematical and physical modeling.
Prerequisite(s): CEE 650 with a minimum grade of D- or ME 608 with a minimum grade of D-.
Grade Mode: Letter Grading

OE 758 - Design of Ocean Structures
Credits: 3
The foundational information necessary for the design of ocean structures. Topics include analysis and design of floating body, fixed body and moored line hydrostatics; wave forces on small and large bodies; dynamic response of floating bodies; and pile and gravity foundation geotechnics.
Prerequisite(s): (ME 526 with a minimum grade of D- or CEE 502 with a minimum grade of D-) and (ME 608 with a minimum grade of D- or CEE 650 with a minimum grade of D-) and OE 754 with a minimum grade of D- and MATH 527 with a minimum grade of D-.
Grade Mode: Letter Grading

OE 765 - Underwater Acoustics
Credits: 3
An introduction to acoustics in the ocean. Fundamental acoustic concepts including the simple harmonic oscillator, waves on strings, and the acoustic wave equation; the sonar equation; sound generation and reception by underwater acoustic transducers and arrays; basics of sound propagation; reflection and scattering from ocean boundaries. Spring semester offered every year; satisfies core course requirement in Ocean Engineering.
Prerequisite(s): (PHYS 408 with a minimum grade of D- or PHYS 408S with a minimum grade of D- or PHYS 408H with a minimum grade of D-) and MATH 527 with a minimum grade of D-.
Grade Mode: Letter Grading

OE 770 - Geodesy for Ocean Mapping
Credits: 3
Ocean mapping requires precise positioning and navigation. For this we need to precisely know Earth's shape, gravity field, and orientation in space. Data used for this purpose include satellite-based positioning, gravity measurements, and ground surveys. Reference frames can then be created allowing the integration of geometric observations for the creation of mapping products.
Prerequisite(s): (MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-) and (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D- or PHYS 401 with a minimum grade of D-).
Grade Mode: Letter Grading

OE 771 - Positioning for Ocean Mapping
Credits: 4
Ocean mapping necessitates accurate positioning and navigation, which, in turn, rely on a comprehensive grasp of measurement methodologies. This course will comprehensively examine various positioning techniques, including spirit leveling, total stations, Global Navigation Satellite Systems (GNSS), inertial navigation systems (INS), and underwater acoustic positioning systems. Emphasis will be placed on the observational methodologies associated with each technology, along with the propagation of observation uncertainty.
Prerequisite(s): (ESCI 770 with a minimum grade of D- or OE 770 with a minimum grade of D-) and (MATH 426 with a minimum grade of D- or MATH 426H with a minimum grade of D-) and (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D- or PHYS 401 with a minimum grade of D-).
Equivalent(s): ESCI 771
Grade Mode: Letter Grading

OE 774 - Integrated Seabed Mapping Systems
Credits: 4
Overview of typical applications that involve mapping the sediment-water interface in the ocean and adjacent waters. Emphasis on defining the task-specific resolution and accuracy requirements. Fundamentals of acoustics relevant to seabed mapping. Progression through typical configurations involving single beam, sidescan, phase differing and multibeam systems. Integration of asynchronous 3D position, orientation and sound speed measurements with sonar-relative acoustic travel time and angles. Analysis of impact of offsets, mis-alignments and latency in all integrated sensors.
Grade Mode: Letter Grading

OE 795 - Special Topics
Credits: 2-4
New or specialized courses and/or independent study. May be repeated barring duplication of subject.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

OE 796 - Independent Study
Credits: 1-4
Independent study for exceptional students. Individual reading, writing, or laboratory work carried out under the tutelage of a faculty member. May be used as a technical elective for the ocean engineering major if taken for 3-4 credits.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

OE 797 - Honors Seminar
Credits: 1
Course enrichment and/or additional independent study in subject matter pertaining to 600- or 700-level OE courses.
Attributes: Honors course
Repeat Rule: May be repeated for a maximum of 3 credits. May be repeated up to 3 times.
Grade Mode: Letter Grading

Operations Management (OPS) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

OPS 600 - Operations Management
Credits: 4
This course analyzes complex operating situations faced by technical and business managers. Students learn the role of the operations manager in the enterprise as well as demonstrate an understanding of the scope of an operations strategy. Students develop operations strategies to meet organizational requirements while analyzing operations processes. The course also offers students an opportunity to apply knowledge that contributes to the operations success of organizations.
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-.
Equivalent(s): MGMT 627G, OPS 627G
Grade Mode: Letter Grading

OPS 605 - Quality Management
Credits: 4
This course provides students with understanding and knowledge of the philosophies and methods used to improve effectiveness and efficiency of organizational processes for businesses. Topics may include statistical methods for quality improvement in manufacturing and service operations. Emphasis is given to both the technical and managerial issues in understanding and implementing quality as a component for success in today's global business environment.
Prerequisite(s): (MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-) and (MTH 504 with a minimum grade of D- or MATH 504G with a minimum grade of D-).
Equivalent(s): MGMT 619G, OPS 619G
Grade Mode: Letter Grading

OPS 610 - Sustainable Facility Operations
Credits: 4
This course provides an overview of the role of an operations manager in facility and venue management. Sustainable facility management includes maintenance, cleaning/housekeeping, engineering, heating, ventilation, and air conditioning (HVAC), utility usage management, budgets, security, crisis management/emergency management, and production. This course covers the general systems and processes related to the planning, programming, design, construction, and occupancy of facilities, including long-range, strategic and tactical planning, the relationship between facility planning and business planning, organization of sites, and buildings.
Prerequisite(s): DAT 510 with a minimum grade of D- or DATA 510G with a minimum grade of D-.
Equivalent(s): OPS 610G
Grade Mode: Letter Grading

OPS 720 - Fundamentals of LEAN Process Improvement
Credits: 4
This course promotes an understanding of the theoretical and practical aspects of LEAN processes, and how LEAN thinking can be applied in a variety of contexts and applications. Students will be exposed to a range of LEAN tools that prepare learners to actively participate in LEAN processes and events in support of the development of a LEAN organizational culture. Developing capacity in facilitation and change management, students will prepare to become LEAN practitioners, learning to guide a group through problem solving circumstances, while considering the challenges of organizational change.
Attributes: Writing Intensive Course
Equivalent(s): OPS 628G
Grade Mode: Letter Grading

Outdoor Education (OUT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

OUT 444A - Risk and the Human Experience
Credits: 4
Explores the construct of risk in two phases: 1) knowledge building, focusing on the historical development of risk and its current manifestations in contemporary society; and 2) knowledge application, which focuses on applying conceptions of risk to various case study examples. The second phase of the course employs a problem-based learning approach with four distinct modules that ask students to apply, experience, and evaluate risk in a variety of contexts. Each module includes: a) a case study description, b) an experiential exercise, and c) a collaborative debriefing of the experience and reflective application to broader societal issues.
Attributes: Social Science (Discovery); Inquiry (Discovery)
Equivalent(s): KIN 444A
Grade Mode: Letter Grading

OUT 515 - History of Outdoor Pursuits in North America
Credits: 4
Voluntary pursuits in the outdoors have defined American culture since the early 17th century. Over the past 400 years, activities in outdoor recreation an education have reflected Americans' spiritual aspirations, imperial ambitions, social concerns, and demographic changes. This course will give students the opportunity to learn how Americans' experiences in the outdoors have influenced and been influenced by major historical developments of the 17th, 18th, 19th and 20th, and early 21st centuries. This course is cross-listed with RMP 515.
Attributes: Historical Perspectives(Disc)
Equivalent(s): KIN 515, RMP 515
Grade Mode: Letter Grading

OUT 539 - Artificial Climbing Wall Management
Credits: 2
The primary purpose of this course is an introduction to the procedures, methods, and techniques of artificial climbing wall management. Within the scope of this course, students will be introduced to operations, supervision, equipment and facility use/maintenance, risk management strategies, route setting, individual an group programming/facilitation/ teaching, technical skills and rescues/emergency procedures. A variety of teaching styles will be used to familiarize students with each topic area. Optional certification fee.
Equivalent(s): KIN 539
Grade Mode: Letter Grading
Special Fee: Yes

OUT 540 - Top Rope Rock Climbing
Credits: 4
Provides students with an understanding of the equipment, techniques, and procedures necessary for the setup and management top rope rock climbing and rappelling sites, including advanced rescue skills. Students also develop basic climbing movement techniques and skills, an understanding of the pedagogical techniques used in climbing, and the requisite knowledge/skill development to conduct safe top rope experiences in multiple settings. The format of this course is a combination of demonstration/lecture and "hands-on" learning with the emphasis upon student interaction and practical skill development.
Equivalent(s): KIN 540
Grade Mode: Letter Grading
Special Fee: Yes

OUT 541 - Technical Operation of Aerial Adventure Courses
Credits: 2
Advanced technical skills course will provide students with the skills necessary to manage high ropes courses/canopy tours and ziplines in instructional and commercial environments. Focuses on the development of technical skills and judgment associated with facilitating/guiding clients at height. Topics include equipment management, traditional and advanced belay techniques, self-belayed climbing, gear rescues, and risk management. Course occurs at the UNH Browne Center.
Grade Mode: Letter Grading
Special Fee: Yes

OUT 542 - Sea Kayaking
Credits: 2
An introduction to the technical, teaching, and leadership skills required to assist with kayaking programs on protected waterways. Emphasis is on individual kayaking skills, self- and group-assisted rescues, safety and group management. Students will be introduced to marine environments including ocean travel and navigation. Travel to off-campus sites required.
Grade Mode: Letter Grading
Special Fee: Yes

OUT 545 - High Angle Rescue
Credits: 2
Provides students with the skills necessary to perform self and group rescues in a variety of steep terrain and high angle environments. Students also gain the basic skills necessary for the implementation of self- and partner-rescues while in a technical climbing environment. The skills learned from this class will adapt readily to climber rescue, crevasse rescue, big wall rescue, cave rescue, and vertical urban rescue.
Equivalent(s): KIN 545
Grade Mode: Letter Grading
Special Fee: Yes

OUT 546 - Whitewater Canoeing
Credits: 3
Introduces white water canoeing skills. Students gain a basic understanding of the equipment, techniques, and procedures to conduct canoeing activities in flat water, moving water, and white water environments. Emphasizes development of individual paddling skills, safe and conscientious paddling, and group management on moving water and white water.
Equivalent(s): KIN 546
Grade Mode: Letter Grading
Special Fee: Yes

OUT 547 - Lead Rock Climbing
Credits: 3
Advanced climbing course designed to provide students with a structured environment to transition from top rope rock climbing or sport climbing to multi-pitch traditional lead climbing. Focuses on the development of the technical skills and judgment associated with leading in a multi-pitch environment. Specific topics include use of artificial protection, belay anchor construction, multi-pitch rappelling, knots, rope/belay station management, climbing technique, and multi-pitch leading considerations.
Equivalent(s): KIN 547
Grade Mode: Letter Grading
Special Fee: Yes

OUT 549 - Wilderness Navigation
Credits: 4
Introduces the methods and techniques of wilderness navigation. Topics include map interpretation, compass use, global positioning systems, and other navigation methods. A variety of teaching styles are used to familiarize the students with each topic area, and occur in both classroom and wilderness settings.
Equivalent(s): KIN 549
Grade Mode: Letter Grading
Special Fee: Yes

OUT 551 - Adventure Programming: Backcountry Based Experience
Credits: 4
Introduces the leadership of land-based backpacking programs. Students develop an understanding of backpacking equipment, trip planning and organization, instruction of basic camping skills, implementation of safety procedures and group management on backpacking trips.
Equivalent(s): KIN 551
Grade Mode: Letter Grading
Special Fee: Yes

OUT 552 - Adventure Programming: Water Based Experiences
Credits: 4
Introduces the leadership of canoe expeditions. Students develop an understanding of necessary canoeing equipment, trip planning and organization, instruction of basic canoeing strokes, implementation of safety procedures, and group management on canoe expeditions.
Equivalent(s): KIN 552
Grade Mode: Letter Grading
Special Fee: Yes

OUT 681 - Foundations of Adventure Education
Credits: 4
Through experiential activities, personal reflections, readings, and group and independent projects, students will gain an understanding of models and theories underpinning adventure education. The course includes content such as adventure education history, outdoor leadership, personal growth, group development, risk taking and risk management, educational philosophy, and learning theory. Students learn to apply theoretical principles to practice in a variety of settings.
Attributes: Writing Intensive Course
Equivalent(s): KIN 681
Grade Mode: Letter Grading

OUT 682 - Experiential Teaching & Leadership
Credits: 2
This class provides an orientation to experiential learning, teaching, and leadership in outdoor recreation, education, and instructional settings. Students develop and implement program designs and lesson plans, gaining practice with teaching methods, activity facilitation, leadership styles, and risk management considerations in outdoor recreation programs.
Prerequisite(s): RMP 411 (may be taken concurrently) with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Grade Mode: Letter Grading
Special Fee: Yes

OUT 686 - Wilderness Emergency Medical Care
Credits: 4
Standards of practice for professional providing emergency medical care in remote areas. Consideration of prolonged transport times, severe environments, and the use of portable and improvised equipment. Topics include wilderness trauma and illness, search and rescue operations, and environmental emergencies.
Equivalent(s): KIN 686
Grade Mode: Letter Grading
Special Fee: Yes

OUT 693 - Teaching Assistantship
Credits: 2
Students serve as teaching assistants in assigned class activities. Assignments to be made by the class instructor may include teaching and administrative duties.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

Paul College Business & Economics (PAUL)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PAUL 405 - FIRE: First-Year Innovation and Research Experience I
Credits: 1
FIRE (First Year Innovation and Research Experience) is designed to support a successful transition to college life, both personally and academically. Mentored by upperclassmen, this course assists students in navigating campus resources, developing academic success strategies, and working collaboratively with their peers. The course encourages goal setting, innovation, research skills, and builds the foundation to be successful in the university and at Paul College through a year-long group project that extends into PAUL 406. PAUL 405 and 406 are required for all first-year students in Paul College.
Grade Mode: Credit/Fail Grading

PAUL 406 - First-Year Innovation and Research Experience II
Credits: 1
Building on the foundation established in PAUL 405: FIRE I, this course guides students through the culmination of their year-long research projects with a focus on professional development, business plan creation, and effective presentation skills. Students refine their research into actionable strategies, incorporate sustainability and ethical considerations, and prepare polished business plans for real-world application. The course emphasizes professional communication, teamwork, and critical thinking, culminating in the FIRE Undergraduate Research Conference where projects are evaluated by alumni, faculty, and staff. PAUL 406 provides students with the skills, experience, and confidence to translate research into impact.
Grade Mode: Credit/Fail Grading

PAUL 407 - Paul Scholars Seminar
Credits: 1
Weekly seminar curriculum is designed to guide academically talented students to achieve their full potential, enhancing their overall educational experience at UNH. The course will expose the Paul Scholars to the high-impact opportunities available at UNH (study abroad, study away, research, etc.) and guide students in evaluating current and desired skillsets leading to the identification of experiences to close their skills gap. Students are responsible for attending and participating in all class sessions and other activities as assigned throughout the course.
Grade Mode: Credit/Fail Grading

PAUL 408 - Inclusive Leadership Fellows Seminar
Credits: 1
This course is designed to empower the Inclusive Leadership Fellows through mentorship, skill development, and exposure to diverse perspectives. The aim is to enhance leadership skills, foster a sense of belonging, and provide opportunities for networking and professional growth.
Grade Mode: Credit/Fail Grading

PAUL 409 - Paul Academic Recovery Course
Credits: 1
PARC is a semester-long course designed for first-year Paul College students who have received an academic notice. The course focuses on helping students regain good academic standing by developing essential academic skills and strategies. Using the foundational pillars of preparation, action, reflection, and connection, students will learn to manage their time effectively, utilize resources, and foster a growth mindset. By the end of the course, students will be equipped with the tools needed for continued success at Paul College and beyond.
Grade Mode: Credit/Fail Grading

PAUL 450 - Personal Finance
Credits: 4
This course will provide an overview of the personal financial planning process, including the establishment of goals and objectives, forecasting of lifetime income and expenditures, evaluation of investment options, money management, and understanding of all the many ways a person can achieve their financial goals through various strategies. The course covers the concepts, theories and analytical methods used in professional personal financial planning. Students analyze the effects of inflation, changing interest rates and taxation (high level taxation) on their investment decisions. The course is designed to expose students to all of the directly applicable mathematical formulas involved in the finance world that we utilize on a daily basis.
Attributes: Quantitative Reasoning(Disc)
Grade Mode: Letter Grading

PAUL 505 - FOCUS: Finding Opportunities, Careers, and University Success
Credits: 2
This course supports the success of second-year students at Paul College by helping them build a strong academic and professional foundation. Through online assignments, peer-led workshops, program events, and campus partnerships, students will explore academic pathways, prioritize personal and professional development opportunities, and connect their interests to future career opportunities. Emphasizing both individual growth and community engagement, the FOCUS Program fosters an inclusive environment that elevates student well-being, university success, and career readiness. PAUL 505 is required for all second-year students at Paul College.
Grade Mode: Credit/Fail Grading

PAUL 520 - Topics I
Credits: 1-4
Special Topics, vary by semester.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

PAUL 620 - Topics
Credits: 4
Special topics, vary by semester.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

PAUL 626 - Supervised Student Teaching
Credits: 2-4
Participants are expected to perform such functions as leading discussion groups, assisting faculty in undergraduate courses that they have successfully completed. For juniors and seniors with 3.0 or better cumulative GPA. No more than four credits may be earned for their role as an instructional assistant in any one course. Permission of instructor and undergraduate programs office required.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Credit/Fail Grading

PAUL 660 - BiP-Social Intelligence Topics
Credits: 2
Business in Practice: Social Intelligence develops students' abilities to navigate complex social relationships and environments. An emphasis is placed on experiential learning and instruction from business professionals. Rotating topic courses are offered to meet the needs of the ever-changing business environment. Cr/F, unless noted as letter graded in the section or additional course details.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

PAUL 670 - BiP-Analytical Intelligence Topics
Credits: 2
Business in Practice: Analytical Intelligence develops students' abilities to analyze ideas, solve problems and make decisions. An emphasis is placed on experiential learning and instruction from business professionals. Rotating topic courses are offered to meet the needs of the ever-changing business environment. Cr/F, unless noted as letter graded n the section or additional course details.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

PAUL 680 - BiP-Competitive & Professional Intelligence Topics
Credits: 2
Business in Practice: Competitive Intelligence develops students' abilities to gather, analyze, and distribute information and ideas about products, customers, competitors or the external environment. An emphasis is placed on experiential learning and instruction from business professionals. Rotating topic courses are offered to meet the needs of the ever-changing business environment. Cr/F, unless noted as letter graded in the section or additional course description.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

PAUL 690 - BiP-Professional Intelligence Topics
Credits: 2
Business in Practice: Professional Intelligence develops students' abilities to achieve professional success. An emphasis is placed on experiential learning and instruction from business professionals. Rotating topic courses are offered to meet the needs of the ever-changing business environment. Cr/F, unless noted as letter graded in the section or additional course details.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

PAUL 705 - Supervised Student Teaching: Peer Advisor
Credits: 0-2
Training course for peer advisors to prepare for leading student FIRE Teams. For Paul College juniors and seniors with 3.0 or better cumulative GPA. Permission from Undergraduate Programs Office required.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Credit/Fail Grading

PAUL 720 - Topics II
Credits: 4
Special topics, vary by semester.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

PAUL 725 - Independent Study
Credits: 1-4
Individual research projects that are student designed. Initial sponsorship of a Paul College faculty member must be obtained followed by approval of Paul advisor and Dean's Office. Special permission required to earn more than 4 credits in one semester. For Paul College Juniors and Seniors with 3.0 or better cumulative GPA.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

PAUL 725W - Independent Study
Credits: 1-4
Individual research projects that are student designed. Initial sponsorship of Paul College faculty member must be obtained followed by approval of Paul advisor and Dean's Office. Special permission required to earn more than 4 credits in one semester. For Paul College Juniors and Seniors with 3.0 or better cumulative GPA.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

PAUL 790 - Honors/The Workshop
Credits: 2
Open to students enrolled in the Paul Honors Program, this workshop is specifically designed for honors students starting the program in their junior year. It is designed to enable students to share the work they are doing for the honors designated course. The workshop will also include guest speakers and other programming of interest to Paul Honors Students.
Attributes: Honors course
Equivalent(s): ADMN 790
Grade Mode: Credit/Fail Grading

PAUL 792 - Honors Seminar
Credits: 2
This course is designed to broaden perspectives, creating a socially conscious mindset of the impact of business activity. Students will explore a variety of topics with a focus that is open to various global issues, the future of business, or learn about faculty research interests in a relaxed environment. This seminar will allow students to see the cross-disciplinary nature of business practices and research.
Attributes: Honors course
Equivalent(s): ADMN 792
Grade Mode: Credit/Fail Grading

PAUL 794 - Honors/The Research Process
Credits: 2
Open to students enrolled in the Paul Honors Program, this course is designed to help students formulate a thesis topic, learn the skills needed to write a thesis and serve as a mechanism for pairing students with a faculty thesis advisor. In addition, students will be expected to attend several research seminars.
Attributes: Honors course
Equivalent(s): ADMN 794
Grade Mode: Credit/Fail Grading

PAUL 795 - Internship
Credits: 1-4
The internship is designed to provide practical experience in a major related field (organizations may include: business, industry, health, public service, non-profit), Supervision to be provided by a qualified individual in the organization, with student consultation by a faculty sponsor. Written report required. Initial sponsorship of an Paul College faculty member must be obtained followed by approval of PAUL advisor and Dean's Office. Special permission required to earn more than 4 credits in one semester. For Paul College Juniors and Seniors with 3.0 or better cumulative GPA.
Repeat Rule: May be repeated for a maximum of 12 credits. May be repeated up to 4 times.
Equivalent(s): ADMN 795
Grade Mode: Credit/Fail Grading

Philosophy (PHIL)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PHIL 401 - Introduction to Philosophy
Credits: 4
This course gives a basic grounding in Philosophy. We explore enduring questions that we have all grappled with: Does God exist? Do we have free will? How can we lead fulfilling lives? No background in philosophy is needed, only an open and inquiring mind.
Attributes: Humanities(Disc)
Equivalent(s): PHIL 401H, PHIL 401W
Grade Mode: Letter Grading

PHIL 405 - Critical Thinking
Credits: 4
One of the most salient features of our culture is that there is so much BS. Most people are overconfident about their ability to avoid being taken in by it. This course aims to sharpen your BS detection skills and help you to diagnose errors in reasoning. You will learn how to check your (often unreliable) gut reactions, improve your critical thinking skills, and identify specious arguments across a range of topics.
Attributes: Humanities(Disc); Inquiry (Discovery)
Grade Mode: Letter Grading

PHIL 410 - Happiness, Well-Being , and a Good Life
Credits: 4
A sustained exploration of happiness, well-being, and a good life. Are they the same? If not, do any include the others, and can they conflict? What sorts of things might contribute to or detract from happiness, well-being, and having a good life? Comparing work on these topics in philosophy and psychology will be a key theme in the course.
Attributes: Humanities(Disc); Inquiry (Discovery)
Grade Mode: Letter Grading

PHIL 412 - Beginning Logic
Credits: 4
Principles of reasoning and development of symbolic techniques for evaluating arguments.
Attributes: Quantitative Reasoning(Disc)
Equivalent(s): PHIL 412H
Grade Mode: Letter Grading

PHIL 417 - God, Religion, and the Meaning of Life
Credits: 4
An introductory philosophical exploration of the relationship between reason and religious experience, particularly as this relationship has developed in and in response to, the great world religions.
Attributes: Humanities(Disc); Writing Intensive Course
Grade Mode: Letter Grading

PHIL 419 - Race, Gender and Social Justice
Credits: 4
We are in the midst of a social reckoning in the United States. Black Lives Matter and #Me Too have turned a spotlight on the murder of black people by police officers and the sexual assault of women. Public health events reveal racialized health care inequities and unfair domestic and care work for women. This course provides philosophical tools that help us to understand our social world, its history, and to consider how to contribute solutions.
Attributes: Humanities(Disc); Inquiry (Discovery)
Equivalent(s): PHIL 419W
Grade Mode: Letter Grading

PHIL 420 - Introduction to Philosophy of Law and Justice
Credits: 4
Introduction to debates regarding how ethical values relate to law and justice. Is justice universal or relative? Are laws making progress toward justice? How should we balance liberty and equality? Should freedom of speech be an absolute right? Does the state have too much power, or too little? Are laws applied fairly by police and the justice system? Why do we punish? What is the relationship between wealth, race, and justice? Discussion.
Attributes: Humanities(Disc); Writing Intensive Course
Grade Mode: Letter Grading

PHIL 421 - Philosophy and the Arts
Credits: 4
Contemporary philosophic concerns and perspectives as reflected in one or more of the arts (literature, theatre, film, music, plastic art).
Attributes: FinePerformingArts(Discovery); Inquiry (Discovery); Writing Intensive Course
Equivalent(s): PHIL 421H
Grade Mode: Letter Grading

PHIL 424 - The Future of Humanity: Science, Technology, and Society
Credits: 4
Consideration of the impacts of science and technology on humanity from a philosophical perspective. Topics often include genetic engineering, automated labor, advanced weaponry, artificial intelligence, social media and data extraction, space exploration, alien contact, virtual realities, transhumanism, and the future of humanity as an interplanetary species.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): PHIL 424H
Grade Mode: Letter Grading

PHIL 424H - Honors/The Future of Humanity: Science, Technology, and Society
Credits: 4
Consideration of the impacts of science and technology on humanity from a philosophical perspective. Topics often include genetic engineering, automated labor, advanced weaponry, artificial intelligence, social media and data extraction, space exploration, alien contact, virtual realities, transhumanism, and the future of humanity as an interplanetary species.
Attributes: Environment,TechSociety(Disc); Honors course
Equivalent(s): PHIL 424
Grade Mode: Letter Grading

PHIL 430 - Ethics and Society
Credits: 4
Critical study of principles and arguments advanced in discussion of current moral and social issues. Possible topics: violence, rules of warfare, sexual morality, human rights, punishment, abortion.
Attributes: Humanities(Disc)
Equivalent(s): PHIL 430H, PHIL 430W
Grade Mode: Letter Grading

PHIL 430W - Ethics and Society
Credits: 4
Critical study of principles and arguments advanced in discussion of current moral and social issues. Possible topics: violence, rules of warfare, sexual morality, human rights, punishment, abortion.
Attributes: Humanities(Disc); Writing Intensive Course
Equivalent(s): PHIL 430, PHIL 430H
Grade Mode: Letter Grading

PHIL 431 - Business Ethics
Credits: 4
An interdisciplinary study of ethical issues in business. This course, taught collaboratively by business school and philosophy department faculty, applies philosophical perspectives, critical thinking, and analysis to ethical decision-making and implementation in the workplace as well as the broader context of other businesses, customers, society, and the environment.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

PHIL 432 - Ethics Bowl: Developing and Discussing Arguments about Current Events
Credits: 4
The Association for Practical and Professional Ethics releases approximately fourteen case studies each year for the annual regional Intercollegiate Ethics Bowl, and students in this course will learn to develop, defend, and discuss their views on these cases. Students will learn to apply various ethical theories to these nuanced problems in current events. Depending on interest and experience, some students will have the opportunity to represent UNH in the regional Ethics Bowl competition—and potentially advance to the national tournament. Students do not have to commit to being on the UNH Ethics Bowl team to take this class, and being in the class does not guarantee a spot on the team. Class meetings will often involve scrimmages on the cases to practice ethical reasoning and oral communication skills. Because the cases change annually, the course can be repeated for credit.
Repeat Rule: May be repeated for a maximum of 16 credits. May be repeated up to 4 times.
Grade Mode: Letter Grading

PHIL 435 - Human Nature and Evolution
Credits: 4
Philosophy of biology and the evolutionary process. Readings of scientists and philosophers' commentary on scientists. Examination of the differences between scientific debate and philosophic debate. Philosophical study of scientific theory stressing humans' place in the natural world and the ethical implication of humans as natural beings in the evolutionary process.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): PHIL 435H
Grade Mode: Letter Grading

PHIL 436 - Social and Political Philosophy
Credits: 4
Examines social and political thought that may include texts from ancient through contemporary times, addressing topics such as natural rights, revolution, law, freedom, justice, power. Questions may include: What is a community, and how are individuals related to communities? Can any particular form of government be morally justified, and if so, what kind of government? Can anarchism work? Is there something wrong with a society in which there is private ownership of property? What is oppressive? What is freedom, and are we free? What roles should different forms of power play in a society? Could and should there be a genderless society? Is ethnic diversity valuable?.
Attributes: Humanities(Disc); Inquiry (Discovery)
Equivalent(s): PHIL 436H, PHIL 436W, PHIL 437
Grade Mode: Letter Grading

PHIL 436H - Honors/Social and Political Philosophy
Credits: 4
Examines social and political thought that may include texts from ancient through contemporary times, addressing topics such as natural rights, revolution, law, freedom, justice, power. Questions may include: What is a community, and how are individuals related to communities? Can any particular form of government be morally justified, and if so, what kind of government? Can anarchism work? Is there something wrong with a society in which there is private ownership of property? What is oppressive? What is freedom, and are we free? What roles should different forms of power play in a society? Could and should there be a genderless society? Is ethnic diversity valuable?.
Attributes: Honors course; Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Equivalent(s): PHIL 436, PHIL 436W, PHIL 437
Grade Mode: Letter Grading

PHIL 436W - Social and Political Philosophy
Credits: 4
Examines social and political thought that may include texts from ancient through contemporary times, addressing topics such as natural rights, revolution, law, freedom, justice, power. Questions may include: What is a community, and how are individuals related to communities? Can any particular form of government be morally justified, and if so, what kind of government? Can anarchism work? Is there something wrong with a society in which there is private ownership of property? What is oppressive? What is freedom, and are we free? What roles should different forms of power play in a society? Could and should there be a genderless society? Is ethnic diversity valuable?.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Equivalent(s): PHIL 436, PHIL 436H, PHIL 437
Grade Mode: Letter Grading

PHIL 440A - Honors/Who Are You? Personal Identity and Humanity
Credits: 4
What makes you you? Are you the same person over time? What does it mean to be a person? How is being a person related to being a human being? This course is part of an Honors Symposium on the nature of personhood and humanity. We will explore a number of philosophical questions related to personal identity over time, the social construction of the self, and the relationship between being a member of homo sapiens and being a person.
Attributes: Honors course; Humanities(Disc)
Grade Mode: Letter Grading

PHIL 440B - Honors/Who's Human Now?
Credits: 4
When we call someone human or a person, what do we mean, and what are we trying to do? How has the concept of personhood expanded or contracted to include more or fewer beings and why? Are fetuses persons? Are corporations persons? Are chimps persons? Who counts as a person now, and who will count as a person in the future? How and why are human persons subject to dehumanization? Readings and texts will draw from historical sources and contemporary philosophy. No credit if credit earned for PHIL 780.
Attributes: Honors course; Humanities(Disc)
Grade Mode: Letter Grading

PHIL 440C - Honors/The Copernican Lens: Finding a Place for Humanity
Credits: 4
How do humans fit into the cosmos? Once, we thought we were central players; most human societies believed they played a starring role, second only to the gods. Developments in the sciences have led modern humanity to a far more modest view: our existence is full of contingency and without cosmic significance. Humanity's self-conception is now recognized to be deeply culturally conditioned: is an objective view of humanity's place even possible?.
Attributes: Honors course; World Cultures(Discovery); Writing Intensive Course
Grade Mode: Letter Grading

PHIL 447 - A.I., Robots, and People
Credits: 4
The historical origins of the science of computation. The implications of the nature of information-processing for understanding the mind-body relation. Examines the possible social, economic, and educational consequences of the computer revolution.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): PHIL 447H
Grade Mode: Letter Grading

PHIL 450 - Environmental Ethics
Credits: 4
Thoughtful people cannot help escape considering hard questions about our relationship to the natural world and what it means for the future of life on earth. In this course we think philosophically about these crucial concerns. We try to answer questions about our responsibilities to the environment and to future generations.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): PHIL 450H
Grade Mode: Letter Grading

PHIL 495 - Tutorial Reading
Credits: 1-4
Basic introductory reading under faculty direction on topics of philosophical importance. Books offered for tutorial reading may be in any area the instructor chooses or on independent study basis.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

PHIL 500 - Workshop
Credits: 4
Introduces methods of studying philosophical texts. Emphasizes reading philosophical texts and arguments for comprehension, and on writing philosophically with accuracy and clarity. Open to PHIL majors (PHIL minors may enroll if they receive permission).
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

PHIL 510 - Philosophy and Feminism
Credits: 4
Focuses on philosophical issues in feminism primarily through the work of historical and contemporary philosophers. Topics include the question of the nature of women, feminism as an ethical and political theory, feminism as an exploration and transformation of the self, feminism as a philosophical methodology, and the institutions of marriage and motherhood.
Attributes: Humanities(Disc); Writing Intensive Course
Grade Mode: Letter Grading

PHIL 520 - Introduction to Eastern Philosophy
Credits: 4
Major Eastern traditions of philosophy. Concentration on Indian, Chinese, and Japanese systems may vary from semester to semester.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

PHIL 525 - Existentialism
Credits: 4
Readings from existential philosophy and literature. Selections may be drawn from the works of Kierkegaard, Nietzsche, Heidegger, Sartre, Camus, de Beauvoir, Buber, Bultman, Merleau-Ponty, Tillich, Kafka, and others.
Attributes: Humanities(Disc); Inquiry (Discovery)
Equivalent(s): PHIL 525H
Grade Mode: Letter Grading

PHIL 530 - Ethics
Credits: 4
Critical examination of the development of philosophical thinking regarding human values, rights, and duties.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

PHIL 531 - Topics in Professional and Business Ethics
Credits: 4
Content variable. Examines a topic or topics related to ethical issues in professional and business situations. Some variations of the course will look in-depth at a specific issue, such as consumer behavior, medical ethics, discrimination, or the theory of the film. Alternatively, the course may examine, from one or more ethical perspectives, a wide range of issues related to business activity, workplace culture, regulation, and economic practices.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

PHIL 560 - Philosophy Through Fiction
Credits: 4
Philosophical implications of representative literary works, read in tandem with philosophical literature. The content will vary. The literary works explored may be drawn from ancient times through modern times. For examples, the classic Greek tragedy "Antigone" might be explored for its implications regarding moral, political, and feminist philosophy, or the philosophical implications of an anti-utopian contemporary work like "Brave New World" might be explored, or short stories drawn from science fiction and other speculative fiction might be used to explore the possibility of time travel or of machines with mental lives.
Attributes: Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

PHIL 565 - Philosophy Through Film
Credits: 4
Philosophical exploration of film as a medium for developing philosophical ideas and for stimulating philosophical thinking about various issues reflected in film, from traditional philosophical issues to the pressing social and cultural issues of our time. The content will vary. Philosophical texts are read in tandem with screenings of a range of movies from Hollywood blockbusters and art house films to films made for TV. Philosophical issues such as the nature of consciousness, appearance and reality, God and evil, the good life, and time and memory might be explored. Film might also be used to examine representations of race and gender or violence in society; and the power of movies to influence society might be explored through documentaries and propaganda films. Required evening film screenings in addition to regular class meetings.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

PHIL 570 - Ancient Philosophy
Credits: 4
Development of Western philosophy from its beginnings in Greece to the Roman period, with particular emphasis on the thought of Plato and Aristotle. Attention is paid to the historical context and the development of ideas in culture.
Attributes: Humanities(Disc)
Equivalent(s): PHIL 570H
Grade Mode: Letter Grading

PHIL 580 - Modern Philosophy from Descartes to Kant
Credits: 4
The birth and development of distinctively modern philosophy in the thought of such creative minds as Galileo, Descartes, Hobbes, Leibniz, Spinoza, Locke, Berkeley, Hume, Rousseau, Reid, Kant, and others.
Grade Mode: Letter Grading

PHIL 620 - 20th Century European Philosophy
Credits: 4
Major figures or philosophical movements such as phenomenology, existentialism, critical social theory, and post-modernism. Content will vary. Consult Time and Room Schedule for topics.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

PHIL 630 - Neuroscience and Philosophy
Credits: 4
This course has a double focus. It investigates theories concerning the nature of the mind/brain relation, especially in light of recent work in the neurosciences. It also considers the particular presuppositions of and methodological challenges endemic to the neurosciences, along with the relations neuroscience bears to neighboring disciplines.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

PHIL 631 - Topics in the Philosophy of Science
Credits: 4
Many people think that philosophy and science are miles apart. But philosophy of science is a dynamic field. It asks questions like: are scientific explanations always true and what's the difference between science and other ways of knowing? It explores issues such as the relation of science to common sense, the relation of theory to observation, the claim to objectivity in the natural and social sciences, and the role of values in scientific research.
Attributes: Writing Intensive Course
Equivalent(s): PHIL 725
Grade Mode: Letter Grading

PHIL 660 - Law, Medicine, and Ethics
Credits: 4
Critical examination of the diverse legal and moral issues facing the profession of health care. Variable topics may include: duty to provide care; nature of informed consent to treatment; problems of allocating limited health-care resources (e.g., withdrawal of life-support systems, quality-of-life decisions, etc.); patient's right to confidentiality. Problems relating to involuntary preventive care (e.g., involuntary sterilization, psycho-surgery, etc.)
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

PHIL 780 - Special Topics
Credits: 4
Advanced study of special topics: a problem, figure, or movement in the history of philosophy, or selected issues, thinkers, or developments in contemporary philosophy. Repeatable with permission.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to 4 times.
Grade Mode: Letter Grading

PHIL 795 - Independent Study
Credits: 1-8
For students who are adequately prepared to do independent, advanced philosophical work; extensive reading and writing. Before registering, students must formulate a project and secure the consent of a department member who will supervise the work. Conferences and/or written work as required by the supervisor.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

PHIL 798 - Senior Thesis
Credits: 4
Two-course sequence (798, then 799) open only to senior philosophy majors in the University Honors Program, the philosophy department honors-in-major program, or by special permission from the department. All senior thesis candidates must have a proposal approved in the spring of their junior year and a thesis adviser assigned by the chair of the department before registering for 798. Students must orally defend their theses before the department. (See department guidelines for further details).
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

PHIL 799 - Senior Thesis
Credits: 4
Two-course sequence (798, then 799) open only to senior philosophy majors in the University Honors Program, the philosophy department honors-in-major program, or by special permission from the department. All senior thesis candidates must have a proposal approved in the spring of their junior year and a thesis adviser assigned by the chair of the department before registering for 799. Students must orally defend their theses before the department. (See department guidelines for further details).
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

Physics (PHYS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PHYS 400 - Physics Seminar I
Credits: 1
An informal reading and discussion course to introduce students to the general culture of physics, including career possibilities, historical and philosophical aspects of physics, current research at UNH and elsewhere, and physics in the news. Topics vary based on interests of the class. Students in their first year as physics majors (either as freshmen or transfers) are strongly encouraged to take this class.
Repeat Rule: May be repeated for a maximum of 2 credits.
Grade Mode: Credit/Fail Grading

PHYS 401 - Introduction to Physics I
Credits: 0 or 4
Broad survey of classical physics including Newtonian mechanics and fluids. Designed to enable students to appreciate the role of physics in society and technology. Emphasizes the fundamental laws of nature on which all science is based, with applied examples of interest to Life Science. Knowledge of high school algebra, geometry, and trigonometry essential. This course has a lab component. Students must also register for a particular lab. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 402 - Introduction to Physics II
Credits: 0 or 4
Broad survey of classical physics including Thermal properties, Oscillations, Waves, Electricity & Magnetism and Optics. Designed to enable students to appreciate the role of physics in society and technology. Emphasizes the fundamental laws of nature on which all science is based, with applied examples of interest to Life Science. Knowledge of high school algebra, geometry, and trigonometry essential. This course has a lab component. Students must also register for a particular lab. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Prerequisite(s): PHYS 401 with a minimum grade of D- or PHYS 407 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 405 - Intro to Modern Astronomy
Credits: 4
Starting with a survey of the night sky and the daily motions of the stars and planets, this course surveys our current understanding of the Universe. It traces the development of the tools of the modern astronomer and how those tools have led to out theories of the solar system, the life cycle of stars, the formation of elements, the formation of galaxies and the evolution of the universe. Students explore in depth an astronomical topic of their choice through a term paper. The course includes direct experience with astronomical techniques and concepts through the use of the UNH Observatory and Small Radio Telescope, and a visit to a planetarium. Recommended for liberal arts and beginning science students. Knowledge of high school algebra is assumed. Note that this is the same course as PHYS 406, except for the substitution of a term paper instead of a lab. Cannot be taken for credit if credit received for PHYS 406.
Attributes: Physical Science(Discovery)
Equivalent(s): PHYS 406
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 406 - Introduction to Modern Astronomy
Credits: 0 or 4
Starting with a survey of the night sky and the daily motions of the stars and planets, this course surveys our current understanding of the Universe. It traces the development of the tools of the modern astronomer and how those tools have led to our theories of the solar system, the life cycle of stars, the formation of elements, the formation of galaxies and the evolution of the universe. The course includes direct experience with astronomical techniques and concepts through the use of the UNH Observatory and Small Radio Telescope, and a visit to a planetarium. Recommended for liberal arts and beginning science students. Knowledge of high school algebra is assumed. Note that this is the same course as PHYS 405, except for the substitution of a lab instead of a term paper. Cannot be taken for credit if credit received for PHYS 405. This course has a lab component. Students must also register for a particular lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Equivalent(s): PHYS 406H
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 407 - General Physics I
Credits: 0 or 4
Introductory course emphasizing motion, forces, energy, momentum, rotation, and oscillations. Recommended for the student specializing in science and engineering. This version is the traditional format with three lectures, one recitation (problem solving section), and one lab each week. Students in this version must also register for a particular recitation and lab. Prereq: thorough knowledge of algebra, geometry, and trigonometry. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Prerequisite(s): MATH 425 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): PHYS 407H, PHYS 407J, PHYS 407S
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 407H - Honors/General Physics I
Credits: 0 or 4
Introductory course emphasizing motion, forces, energy, momentum, rotation, and oscillations. Recommended for the student specializing in science and engineering. The honors version covers the same material as the traditional lecture course, but with three two-hour classes per week,most of which is spent working on activities in groups (rather than lecture). Students in the Honors section must be co-enrolled in MATH 425H so that strong connections can be made between math and physics. 407H students work in groups in every class meeting. Students in this version do not register for a recitation or lab, since these activities are integrated into the regular class meetings. Prereq: thorough knowledge of algebra, geometry, and trigonometry. Lab.
Co-requisite: MATH 425H
Attributes: Discovery Lab Course; Honors course; Physical Science(Discovery)
Equivalent(s): PHYS 407, PHYS 407S
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 407S - General Physics I Studio
Credits: 4
Introductory course emphasizing motion, forces, energy, momentum, rotation, and oscillations. Recommended for the student specializing in science and engineering. The Studio version covers the same material as the traditional lecture course, but with three two-hour classes per week, most of which is spent working on activities in groups (rather than lecture). Students in this version do not register for a recitation or lab since these activities are integrated into the regular class meetings. Prereq: thorough knowledge of algebra, geometry, and trigonometry. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Prerequisite(s): MATH 425 (may be taken concurrently) with a minimum grade of D-.
Equivalent(s): PHYS 407, PHYS 407H
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 408 - General Physics II
Credits: 0 or 4
Introductory course emphasizing waves, sound, heat, electricity and magnetism. Recommended for students specializing in science and engineering. This version is the traditional format with three lectures, one recitation (problem solving section), and one lab each week. Students in this version must also register for a particular recitation and lab. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Prerequisite(s): (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-) and (MATH 426 (may be taken concurrently) with a minimum grade of D- or MATH 426H (may be taken concurrently) with a minimum grade of D-).
Equivalent(s): PHYS 408H, PHYS 408S
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 408H - Honors/General Physics II
Credits: 0 or 4
Introductory course emphasizing electricity and magnetism. Other topics may include fluids, waves, and thermodynamics. Recommended for students specializing in science and engineering. The honors version covers the same material as the traditional lecture course, but with three two-hour classes per week, most of which is spent working on activities in groups (rather than lecture). Students in the Honors section are encouraged to co-enrolled in MATH 426H so that strong connections can be made between math and physics. 408H students work in groups in every class meeting. This course has a lab component, but students in this version do not register for a recitation or lab, since these activities are integrated into the regular class meetings. Lab.
Co-requisite: INCO 426H
Attributes: Discovery Lab Course; Honors course; Physical Science(Discovery)
Prerequisite(s): (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-) and (MATH 425 with a minimum grade of D- or MATH 425H with a minimum grade of D-) and (MATH 426 with a minimum grade of D- or MATH 426H (may be taken concurrently) with a minimum grade of D-).
Equivalent(s): PHYS 408, PHYS 408S
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 408S - General Physics II Studio
Credits: 4
Introductory course emphasizing electricity and magnetism. Other topics may include fluids, waves, and thermodynamics. Recommended for students specializing in science and engineering. The Studio version covers the same materials as the traditional lecture course, but with three two-hour classes per week, most of which is spent working on activities in groups (rather than lecture). This course has a lab component, but students in this version do not register for a recitation or lab, since these activities are integrated into the regular class meetings. Lab.
Attributes: Discovery Lab Course; Physical Science(Discovery)
Prerequisite(s): (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-) and (MATH 426 (may be taken concurrently) with a minimum grade of D- or MATH 426H (may be taken concurrently) with a minimum grade of D-).
Equivalent(s): PHYS 408, PHYS 408H
Mutual Exclusion: No credit for students who have taken .
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 409 - Investigating Physics
Credits: 4
Elementary physics course where students develop a conceptual understanding of topics such as the solar system, phases of the moon, seasons, electrical circuits, electromagnets, light and color, sound and simple machines. The course is based on hands-on-activities, small groups, and discussions. This course is intended for students with little or no previous experience in physics who do not intend to take any other physics course. Cannot be taken for credit if credit received for PHYS 401, 402, 407 or 408. Not open to Physics majors.
Attributes: Discovery Lab Course; Physical Science(Discovery); Inquiry (Discovery)
Equivalent(s): PHYS 401, PHYS 402, PHYS 407, PHYS 408
Grade Mode: Letter Grading

PHYS 440A - Hon/Searching for Our Place in the Universe: Foundation and Limits of Certainty in Physical Science
Credits: 4
We explore models of the universe and our place in it. We discuss the foundation of ideas about motion on Earth and in space, as well as the history of modern physics and astronomy, which have changed how we understand space and time. We consider the sources and limitations of human knowledge concerning the origin of the universe, the mystery of the origin of life and evidence that our description of reality is incomplete.
Attributes: Honors course; Physical Science(Discovery); Writing Intensive Course
Grade Mode: Letter Grading

PHYS 505 - General Physics III
Credits: 3
Electromagnetic waves, geometrical and physical optics, relativity, atomic physics, elementary quantum mechanics, molecular physics, and nuclear physics.
Prerequisite(s): PHYS 408 with a minimum grade of D- or PHYS 408S with a minimum grade of D- or PHYS 408H with a minimum grade of D-.
Grade Mode: Letter Grading

PHYS 506 - General Physics III Laboratory
Credits: 1
Structured laboratory experience in optics and modern physics. Lab.
Co-requisite: PHYS 505
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 508 - Thermodynamics and Statistical Mechanics
Credits: 4
Classical and statistical approach to thermodynamics, kinetic theory.
Prerequisite(s): PHYS 505 (may be taken concurrently) with a minimum grade of D- and (MATH 525 (may be taken concurrently) with a minimum grade of D- or MATH 527 (may be taken concurrently) with a minimum grade of D- or MATH 528 (may be taken concurrently) with a minimum grade of D-).
Grade Mode: Letter Grading

PHYS 601 - Computational Physics Recitation I
Credits: 1
This course bridges students' computer science class and their physics classes by applying computational tools to basic physics problems. Students will write, check, and document two physics codes. This course focuses on solving differential equations. The course will support students as they work on computational assignments from their core physics courses. Corequisite: PHYS 505 or PHYS 508.
Prerequisite(s): CS 410 with a minimum grade of D- or IAM 550 with a minimum grade of D-.
Grade Mode: Credit/Fail Grading

PHYS 602 - Computational Physics Recitation II
Credits: 1
This course bridges students' computer science class and their physics classes by applying computational tools to basic physics problems. Students will write, check, and document two physics codes. This course focuses on data processing. The course will support students as they work on computational assignments from their core physics courses. Corequisite: PHYS 605 or PHYS 615.
Prerequisite(s): (CS 410 with a minimum grade of D- or IAM 550 with a minimum grade of D-) and PHYS 601 with a minimum grade of D-.
Grade Mode: Credit/Fail Grading

PHYS 605 - Experimental Physics I
Credits: 5
Circuit design with passive and active elements including transistors and operational amplifiers; electrical measurements for experimental physics; digital electronics, microprocessors, and interfacing techniques. Lab.
Prerequisite(s): (PHYS 408 with a minimum grade of D- or PHYS 408S with a minimum grade of D- or PHYS 408H with a minimum grade of D-) and (MATH 525 with a minimum grade of D- or MATH 527 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

PHYS 615 - Classical Mechanics and Mathematical Physics I
Credits: 4
Analytical treatment of classical mechanics covering the dynamics of particles and rigid bodies at an intermediate level. Advanced mathematical analysis (complex numbers, differential equations, Fourier series, multiple integrals) are reviewed or introduced as needed to analyze physical situations.
Prerequisite(s): (PHYS 407 with a minimum grade of D- or PHYS 407S with a minimum grade of D- or PHYS 407H with a minimum grade of D-) and (IAM 550 with a minimum grade of D- or CS 410P with a minimum grade of D-) and ((MATH 527 (may be taken concurrently) with a minimum grade of D- and MATH 528 (may be taken concurrently) with a minimum grade of D-) or (MATH 525 (may be taken concurrently) with a minimum grade of D- and MATH 526 (may be taken concurrently) with a minimum grade of D-)).
Grade Mode: Letter Grading

PHYS 616 - Classical Mechanics and Mathematical Physics II
Credits: 4
Analytical treatment of classical mechanics covering the dynamics of particles and rigid bodies, at an intermediate level. Advanced mathematical analysis (complex numbers, differential equations, Fourier series, multiple integrals) are reviewed or introduced as needed to analyze physical situations.
Prerequisite(s): PHYS 505 with a minimum grade of D- and PHYS 615 with a minimum grade of D-.
Grade Mode: Letter Grading

PHYS 701 - Quantum Mechanics I: Foundations, Quantum Information, and Quantum Computing
Credits: 4
Physics 701 provides a modern introduction to quantum mechanics, quantum information science, and quantum computing. The first two thirds of the course cover the foundations of quantum mechanics, including the Stern-Gerlach experiment, spin-1/2 particles, Dirac (bra-ket) notation, Hilbert space, the Schrödinger equation, operators, eigenvalues, eigenvectors, symmetries, entanglement, and Bell's theorem. The final third covers topics in quantum information science, including quantum computational algorithms, entropy, open systems, and error-correcting codes for quantum computation and communication. Quantum Mechanics I (this course) and Quantum Mechanics II (Physics 702) together provide a solid foundation for graduate study in physics.
Prerequisite(s): PHYS 616 (may be taken concurrently) with a minimum grade of D- and (MATH 525 with a minimum grade of D- or MATH 528 with a minimum grade of D-) and (MATH 526 with a minimum grade of D- or MATH 545 with a minimum grade of D- or MATH 645 with a minimum grade of D-).
Grade Mode: Letter Grading

PHYS 702 - Quantum Mechanics II: Applications to Continuous Systems
Credits: 4
Physics 702 is the second course (after Physics 701) in a two-course sequence on quantum mechanics. Physics 702 covers continuous systems, wave functions, wave packets, the dynamics of a free particle, spin and angular momentum, ladder systems, many-particle systems, stationary states in 1D and 3D, the hydrogen wave function, perturbation theory, the hyper-fine structure of the hydrogen atom, and scattering. Quantum Mechanics I (Physics 701) and Quantum Mechanics 2 (this course) together provide a solid foundation for graduate study in physics.
Prerequisite(s): PHYS 616 with a minimum grade of D- and PHYS 701 with a minimum grade of D-.
Grade Mode: Letter Grading

PHYS 703 - Electricity and Magnetism I
Credits: 4
Foundation of electromagnetic theory; electrostatics, dielectric theory, electromagnetism, magnetic properties of matter, alternating currents, Maxwell's field theory.
Prerequisite(s): (PHYS 408 with a minimum grade of D- or PHYS 408S with a minimum grade of D- or PHYS 408H with a minimum grade of D-) and PHYS 615 with a minimum grade of D- and ((MATH 527 with a minimum grade of D- and MATH 528 with a minimum grade of D-) or (MATH 525 with a minimum grade of D- and MATH 526 with a minimum grade of D-)).
Grade Mode: Letter Grading

PHYS 704 - Electricity and Magnetism II
Credits: 4
Foundation of electromagnetic theory; electrostatics, dielectric theory, electromagnetism, magnetic properties of matter, alternating currents, Maxwell's field theory.
Prerequisite(s): PHYS 703 with a minimum grade of D-.
Grade Mode: Letter Grading

PHYS 705 - Experimental Physics II
Credits: 4
Modern physics experiments and special project problems assigned to individual students. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): PHYS 605 with a minimum grade of D- and PHYS 505 with a minimum grade of D- and (CS 410P with a minimum grade of D- or IAM 550 with a minimum grade of D-).
Grade Mode: Letter Grading

PHYS 708 - Optics
Credits: 4
Geometrical optics, electromagnetic theory of light, interference, diffraction, polarization, related phenomena and nonlinear optics. Lab.
Prerequisite(s): PHYS 505 with a minimum grade of D- and PHYS 615 with a minimum grade of D- and PHYS 616 with a minimum grade of D-.
Grade Mode: Letter Grading

PHYS 710 - Astrophysics I
Credits: 4
A comprehensive review of modern astrophysics. Topics covered include the celestial sphere, celestial mechanics, the tools of the modern astronomer (including different types of telescopes for studying the electromagnetic radiation from space), stellar spectra, stellar atmospheres, stellar interiors, the formation of stars, stellar evolution, and the stellar graveyard (white dwarfs, neutron stars, and black holes).
Prerequisite(s): ((MATH 525 with a minimum grade of D- and MATH 526 with a minimum grade of D-) or (MATH 527 with a minimum grade of D- and MATH 528 with a minimum grade of D-)) and PHYS 505 with a minimum grade of D- and PHYS 506 with a minimum grade of D-.
Grade Mode: Letter Grading

PHYS 711 - Astrophysics II
Credits: 4
A continuation of the comprehensive review of modern astrophysics. Topics covered include the degenerate stellar remnants (white dwarfs, neutron stars, black holes), the interstellar medium, the Milky Way Galaxy, the nature of galaxies, the evolution of galaxies, the structure of the Uni verse, active galaxies, cosmology, and the early Universe.
Prerequisite(s): PHYS 710 with a minimum grade of D-.
Grade Mode: Letter Grading

PHYS 712 - Space Plasma Physics
Credits: 4
Introduces space plasma physics, including solar physics, heliospheric physics, magnetospheric physics, and ionospheric physics. An overview of the basic phenomena and processes (e.g., particle acceleration and transport, shock formation, magnetic structures and reconnection, wave propagation, wave-particle interactions, instabilities), theoretical techniques (e.g., single-particle orbits, kinetic and fluid descriptions), and experimental techniques. (Alternate years only.)
Prerequisite(s): (PHYS 408 with a minimum grade of D- or PHYS 408S with a minimum grade of D- or PHYS 408H with a minimum grade of D-) and PHYS 508 with a minimum grade of D- and PHYS 616 with a minimum grade of D-.
Equivalent(s): EOS 712
Grade Mode: Letter Grading

PHYS 718 - Quantum Materials
Credits: 4
Theory underlying the behavior of solid state and quantum materials. Crystal symmetries, electronic, thermal, and optical properties of metals and semiconductors; selected topics in modern quantum materials and quantum applications.
Prerequisite(s): PHYS 508 with a minimum grade of D- and PHYS 701 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

PHYS 720 - Nuclear Physics
Credits: 4
Nuclear phenomenology, reactions, models, radiation, interaction of radiation with matter; accelerators; properties and interactions of elementary particles; symmetries and symmetry breaking; standard model.
Prerequisite(s): PHYS 702 (may be taken concurrently) with a minimum grade of D- and PHYS 703 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

PHYS 764 - General Relativity and Cosmology
Credits: 4
Review of special relativity, and the motivation for considering gravity in terms of curvature of space time. Introduction to Riemannian geometry, general relativity and Einstein's equations. Application of general relativity in the study of black holes, gravitational waves, cosmology, as well as recent results on inflation and quantum gravity. (Alternate years only.)
Prerequisite(s): PHYS 505 with a minimum grade of D- and PHYS 508 with a minimum grade of D- and PHYS 616 with a minimum grade of D- and (CS 410P with a minimum grade of D- or IAM 550 with a minimum grade of D-) and (MATH 645 with a minimum grade of D- or MATH 545 with a minimum grade of D- or MATH 525 with a minimum grade of D-).
Grade Mode: Letter Grading

PHYS 795 - Independent Study
Credits: 1-8
Individual project under direction of a faculty adviser.
Grade Mode: Letter Grading

PHYS 797 - Senior Design Project
Credits: 2
Four credits of this course is the required Senior Design Project for BSEP majors and fulfills their capstone requirement; the course is taken for two credits in each of the last two semesters before graduation. Students work under the direction of a faculty sponsor on the design aspect of a specific project, which might include trade studies, design reviews, cost-benefit analyses, etc. all leading to an optimal design solution. Acceptable designs can include detailed hardware aspects of a system or sub-system, numerical modeling of a system, or paper studies of a system concept. Students are required to submit a final report and to present their work at a public forum. Restricted to BSEP seniors.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

PHYS 798 - Senior Project
Credits: 2-4
Students complete an independent project and submit a written report. Students can choose from a range of projects, including (but not limited to)a research or numerical project, and extensive literature review on an advanced physics topic, building an apparatus, or developing a new or existing experiment in Physics 705. A student intending to take Physics 798 must arrange to have a faculty advisor for the project and should work with this advisor to develop a one-page project proposal. The student must submit this proposal to the Physics Undergraduate Curriculum Committee by the tenth week of the semester preceding the semester in which the student takes Physics 798. This course satisfies the capstone requirement in Physics.
Grade Mode: Letter Grading

PHYS 799 - Thesis
Credits: 4
Students work under the direction of a faculty sponsor to plan and carry out independent research resulting in a written thesis. Required for honors-in-major.
Attributes: Writing Intensive Course
Prerequisite(s): PHYS 795 with a minimum grade of D- or INCO 790 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Political Science (POL) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

POL 450 - American Government and Politics
Credits: 4
This course introduces the learner to the historical background, the institutions, and the political processes within the United States national government. The focus is on process, but the appropriate attention is given to the institutions of government in which the political processes occur, such as Congress, the courts, and local governments. The course employs a systems model of politics to identify how politics works in the United States. Both process and institutions are studied from a systems perspective so that critical functions and decision points can be identified, described, and assessed. Specific attention will be paid to the legislative process, elections, and enacting change.
Attributes: HumanBehavSocial Sys (Gen Ed); Writing Intensive Course
Equivalent(s): POL 550G
Grade Mode: Letter Grading

POL 554 - Law and Society
Credits: 4
This course is designed to provide an interdisciplinary approach to study of the law, incorporating history, philosophy, economics, political science, sociology, and psychology. Students are introduced to law in society by focusing on social and legal theory analysis from a critical perspective. Beginning with a historical overview of the law, learners explore the variety of forces that shape the law as well as its impact on society at large. In addition, the course provides a basic introduction to legal reasoning and the law in the context of society. Landmark United States Supreme Court criminal and civil cases will also be examined.
Attributes: HumanBehavSocial Sys (Gen Ed)
Equivalent(s): POL 554G
Grade Mode: Letter Grading

POL 690 - The US in World Affairs
Credits: 4
This course examines U.S. foreign relations since WWII with a particular focus on the late twentieth century through modern day. Students will explore patterns of U.S. policy in a volatile environment marked by fundamental changes to the international system of states since the collapse of the Soviet Union. Students trace the transformation in international relations that has led to the creation of world trade and globalized institutions, the proliferation of regional ethnic and religious conflicts, and most challenging of all, the emergence of transnational terrorism. Students will have the opportunity to analyze the international system and relevant political theories, develop competence in defining both transient and enduring national interests, and build confidence in appraising the policy responses of national actors to those challenges.
Attributes: HumanBehavSocial Sys (Gen Ed); Historical Perspectives(Disc); Writing Intensive Course
Equivalent(s): POL 600G
Grade Mode: Letter Grading

Political Science (POLT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

POLT 401 - Politics and Society
Credits: 4
Introduces the nature of politics and political institutions. Emphasizes political behavior and continuing issues of modern politics, such as power, authority, legitimacy, freedom, and order.
Attributes: Humanities(Disc)
Equivalent(s): POLT 401H
Grade Mode: Letter Grading

POLT 402 - American Politics and Government
Credits: 4
Foundational course to help students understand the institutions and actors of American politics and government, the decision-making process of government, and the political considerations that drive American government.
Attributes: Social Science (Discovery)
Equivalent(s): POLT 402H
Mutual Exclusion: No credit for students who have taken PS 402.
Grade Mode: Letter Grading

POLT 403 - United States in World Affairs
Credits: 4
Introduces students to key concepts, actors, and events in U.S. foreign policy. After examining the early foundations of American foreign policy, this course concentrates on the United States' international engagement from the Cold War to the present. Students develop the analytical skills they need to form their own opinions on contemporary issues in U.S. foreign policy, and defend these opinions articulately based on a solid knowledge of historic and current events.
Attributes: Historical Perspectives(Disc)
Equivalent(s): POLT 403H, POLT 403W
Grade Mode: Letter Grading

POLT 404 - Introduction to Comparative Politics
Credits: 4
What are states and how do they develop over time? What are the differences between democracies and authoritarian states and why do countries transition between these forms? How does identity affect politics within countries? Why does violence erupt in some countries? These are some of the questions addressed by this course. This course provides students with an introduction to the field of comparative politics, which focuses on understanding politics within countries. Through case studies, theoretical frameworks, and cross-national analyses, students will explore how political institutions, social structures, and conflicts shape governance and public life around the world. Students will also be introduced to common methods of data collection and analysis in political science, allowing them to understand and engage with academic research.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

POLT 440A - Honors/Global Justice
Credits: 4
The course exposes students to different understandings of global justice and the institutions and approaches used to address genocide and mass human suffering. Students explore several modern conflicts and different cultural understandings of these conflicts and views on justice. The class also examines the political dynamics of international and domestic institutions, power politics, and international activism. Students also examine the globalization of accountability and post-conflict transitions from violence to peace.
Attributes: Honors course; World Cultures(Discovery)
Grade Mode: Letter Grading

POLT 444 - Politics and Policy in a Warming World
Credits: 4
Uses the issue of climate change to explore the relationships between scientific and technical research and debate, policymaking at the international and domestic (U.S.) levels, and public understanding and interpretation of complex technical issues. The course is interdisciplinary.
Attributes: Environment,TechSociety(Disc); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

POLT 444B - Cruel and Unusual in a Federal System
Credits: 4
This course is an exploration of the US/state constitutional language of 'cruel and unusual' as an important limitation on governmental power. Students study its historical origins, interpretations, and applications across time periods and types of regimes. Particular attention will be paid to its association with the death penalty in the contemporary United States.
Attributes: Social Science (Discovery); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

POLT 500 - American Public Policy
Credits: 4
Foundational public policy course examining policy choices and conflicts, how policy decisions are made, how policies are assessed, the development of potential policy solutions, and the politics of policy making. Students engage in a task force project that simulates public policy processes and culminates in a policy recommendation at the end of the semester.
Attributes: Writing Intensive Course
Mutual Exclusion: No credit for students who have taken PS 500.
Grade Mode: Letter Grading

POLT 502 - State and Local Government
Credits: 4
Examines power, policies, political culture, and constitutional settings of state and local governments in the United States. Students study how state legislatures, governors, courts, political parties, and interest groups interact to shape political outcomes at the state and local levels.
Grade Mode: Letter Grading

POLT 504 - American Presidency
Credits: 4
The President as administrator, policy maker, and political leader. The relationship between the President and the public, the media, and other governmental institutions. Historical and constitutional background of the Presidency, role, and powers of the President in domestic and foreign affairs.
Grade Mode: Letter Grading

POLT 505 - American Congress
Credits: 4
Role and powers of Congress as national lawmaker and check on the executive branch: committee structure, concepts of representation, legislative oversight and party cleavage, federal budget control, and foreign policy involvement.
Grade Mode: Letter Grading

POLT 506 - Parties, Interest Groups, and Voters
Credits: 4
Role of political parties as organizers and managers of social conflict. Role of voters in controlling parties and government. Influence of interest groups in the electoral process and in governmental decision making.
Grade Mode: Letter Grading

POLT 507 - Politics of Crime and Justice
Credits: 4
Criminal justice in theory and practice; contemporary role of police, prosecutors, judges, juries, counsel, and interest groups in the administration of criminal justice.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 508 - Supreme Court and the Constitution
Credits: 4
Supreme Court treated as a political institution whose historic mission is to decide all controversies arising under the Constitution between the nation and the states, the President and Congress; the role of the judiciary in defining its own powers, rights, and duties.
Attributes: Writing Intensive Course
Equivalent(s): PS 508
Grade Mode: Letter Grading

POLT 509 - Managing Bureaucracy in America
Credits: 4
Growth and development of the bureaucratic state. Roles and powers of administrative officials, decision making in bureaucratic settings, citizen participation, and the influence of interest groups on bureaucratic policymaking.
Grade Mode: Letter Grading

POLT 511 - Women & Politics
Credits: 4
This class provides a survey of the intersection of women, sex, and gender with politics.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 512 - Public Opinion in American Politics
Credits: 4
Relationship of mass and elite opinion within the context of American political culture. Impact of public opinion on American governmental policies, especially with respect to major issues facing the President and Congress. Appraisal of responsiveness to influence and responsibility to lead.
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

POLT 513 - Civil Rights and Liberties
Credits: 4
Analysis of four major areas of constitutional rights and liberties, political freedom, equal protection of the laws, and due process with particular attention to their impact on such problems as political protest, discrimination, school segregation, students' rights and the relationship between government and religion.
Grade Mode: Letter Grading

POLT 522 - Dissent and the Political Community
Credits: 4
Current political ideologies and controversies in America and abroad; liberal democracy and its critics since the 19th century.
Grade Mode: Letter Grading

POLT 523 - American Political Thought
Credits: 4
Introduces the student to the key questions about politics and government asked and answered by American thinkers and actors, as well as the ways in which those "answers" have shaped our institutions and political processes. Emphasizes the idea of property.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 524 - Politics and Literature
Credits: 4
This course examines classical and contemporary works of literature to explore perennial issues in the study of politics, such as: exceptionalism, individualism, justice, and equality.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

POLT 544 - Of Dictators and Democrats
Credits: 4
Why are some countries democratic, while others are ruled by dictators? In this course, we answer this question by examining the different paths democratizing nations have taken. Following a theoretical overview, we examine early cases of democratic practices, then turn to study cases from each of the “waves” of democracy. In the first wave (18th and 19th centuries) we focus on the United States, testing the ability of theories to predict the emergence of American democracy. In our study of the second wave (post World War II), we investigate Germany’s transition from dictatorship to democracy. To explore the third wave (1980s to the 2000s), we examine the case of Chile. The course concludes with an examination of contemporary trends of democratic reversals and the rise of authoritarian populists. The goal of this course is to provide students with a solid understanding of the process of democratization, and the analytical tools necessary for evaluating democratic development. By the end of this course, students will be able to explain and evaluate different theories of democratization, describe key democratic milestones in the selected countries, and use this theoretical and empirical knowledge to assess current political events around the world.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 545 - People and Politics in Asia
Credits: 4
This course is an introduction to Northeast Asia, with special emphasis on the politics of the region's major actors. Will China be the next global hegemon? Is Japan moribund? Is Taiwan an independent country? Is Hong Kong a democratic bastion? Why does Kim Jong-un keep threatening to attack the United States? This is a mid-level, writing intensive course that will prepare students for more advanced courses on the nations and issues of the Asia-Pacific rim.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 546 - Wealth and Politics in Asia
Credits: 4
Different paths to modernization, industrialization, and development in nations of the Asia-Pacific Rim. In-depth examinations of the challenges faced by Japan, China, Hong Kong/Macao, Taiwan, and the Koreas in their search for the correct path to economic growth and prosperity, with special emphasis on each nation's distinct society and history. Companion course to POLT 545, but either may be taken separately.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 548 - Drug Wars
Credits: 4
The Americas have hosted several wars against drugs, but these militarized campaigns have not curtailed the global consumption of opiates, cocaine, and cannabis. Perhaps even more sobering, the drug wars have coincided with spiraling rates of violent crime. Given this track record, policymakers have begun to reevaluate drug policies in the US and abroad. This course evaluates these contemporary changes, particularly in light of the successes and failures of past drug control policies.
Grade Mode: Letter Grading

POLT 549 - The Politics of Markets
Credits: 4
This course surveys some major debates in comparative political economy, focusing especially on the creation, evolution, and reform of market institutions. The course emphasizes the ways in which the market is embedded in social and political institutions. Main topics include: 1) Theoretical foundations of political economy, 2) Patterns of industrialization, 3) Capitalist institutions in contemporary industrialized countries, 4) Challenges of development, 5) Transitions from communism to a market economy, and current challenges facing capitalism.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading
Special Fee: Yes

POLT 550 - Comparative Government and Society
Credits: 4
Introduces students to key concepts and themes in comparative politics through the study of revolutions, ideologies, institutions, and/or social movements. This course compares interactions between citizens and their governments in various types of democracies as well as authoritarian regimes, and spans industrialized and developing countries.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

POLT 551 - Ethnicity ,Violence, Democracy
Credits: 4
What is ethnic identity and why do ethnic differences result in violence? Are diverse societies prone to conflict? The course provides a broad perspective to these questions by examining diversity and conflict in the Middle East, Europe, Africa, Asia, Latin America and the US. Racial and ethnic politics in the US, while not a primary focus, are compared to identity and conflict in other countries. Students will understand how identity evolves and shapes the world.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 552 - Contemporary European Politics
Credits: 4
Analyzes politics, governments, and societies in contemporary Europe; focuses on basic characteristics of political life in different countries as well as pressing economic, political, and social issues.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 554 - Revolution and Protest in Latin America
Credits: 4
Throughout Latin American history, economic and political models have been heavily contested. Advocates of state intervention in the economy have clashed with free market forces, and these clashes have often spilled into the political arena where they have been further complicated by divisions between dictators and democrats. This course examines these twin processes in Latin American politics, tracing economic and political development from the time of independence to the present.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 556 - Politics in China
Credits: 4
Dynamics of China's domestic political and economic policy processes - from massive starvation of the Great Leap Forward and the ideological upheavals of the Great Proletarian Cultural Revolution to the "Opening of China to the Outside World."
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 559 - Comparative Politics of the Middle East
Credits: 4
Examines the dynamics of political and economic change in states and societies of the Middle East. Covers state formation, nationalism and colonialism, authoritarianism and opposition movements, and the origins of the Israeli-Palestinian conflict.
Grade Mode: Letter Grading

POLT 560 - World Politics
Credits: 4
The course explores the primary issues of world politics with a focus on conflict, cooperation and development. Students are introduced to the principal theories and concepts in the analysis of world politics and encouraged to apply these theories and concepts to contemporary global issues.
Attributes: Social Science (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

POLT 562 - Strategy and National Security Policy
Credits: 4
This course develops an understanding of: 1) strategy and its relationship to national security policy and 2) American national security issues and the process of creating and implementing American national security policies. A primary theoretical and practical consideration is the relationship between the use of force and diplomacy. Among the specific issues are: the nuclear world, the U.S. defense posture, military interventions, and the broadening definition of security.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 566 - International Security in Asia
Credits: 4
Asian international relations continue to challenge global power structures. As the world's most vital region, Asia is characterized by explosive economic growth, diverse political systems, modernizing militaries, and advanced technologies. This course explores the regional political and economic dilemmas, starting with the breakdown of the old imperialist order, Japan's expansion, the Asian Cold War, Korean and Chinese unification, China's post-1978 emergence, North Korea nuclear weapons, and the growing conflict over the Pacific Ocean's marginal seas.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 568 - International Security
Credits: 4
Explores central issues related to security in international politics, including: intelligence collection, emerging technologies, the rise and fall of major interstate wars, nuclear weapons, climate change, terrorism, civil wars, and coercion.
Prerequisite(s): POLT 403 with a minimum grade of D-.
Grade Mode: Letter Grading

POLT 569 - The Rise of China
Credits: 4
Analysis of China's struggle for political and economic power in Asia and the world. Examines the legacy of China's historical encounters with the outside world, interactions with the international system since 1949, domestic determinants of foreign political and economic policies, and theories of decision making.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 580 - Selected Topics Am Politics
Credits: 4
Special topics in American Politics, such as politics and public affairs in New Hampshire, women in politics, and civil liberties. See departmental listings for semester offerings.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

POLT 584 - Selected Topics in Political Thought
Credits: 4
Special issues in political theory, such as liberalism and conservatism, radical political thought, the American character, and others. Not offered every semester. See departmental listings for semester offerings.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 588 - Selected Topics in Comparative Politics
Credits: 4
Specialized areas or issues such as regional politics, national politics, judicial systems, administrative law, constitutions, etc.
Grade Mode: Letter Grading

POLT 592 - Selected Topics in International Politics
Credits: 4
Examines specialized issues in international politics. Topics may include ethnic conflict, non-proliferations and global security, economic and political globalization, etc. Not offered every semester. See departmental listings for semester offerings.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 595 - Smart Politics
Credits: 4
An introduction to empirical research methods in political science, both qualitative and quantitative. Students study all aspects of the research process, including hypothesis-building, concepts and variables, measurement, research design, sampling, and empirical observations. Special attention paid to the use of statistical software.
Attributes: Inquiry (Discovery); Writing Intensive Course
Mutual Exclusion: No credit for students who have taken PS 595.
Grade Mode: Letter Grading

POLT 602A - Internship
Credits: 4
Field experience in a governmental or nongovernmental organization at the local, state, national, or international level. Arrangements must be made through the political science department. Open to juniors and seniors with at least a 3.2 GPA. Permission of the undergraduate curriculum committee of the department is required prior to the internship.
Grade Mode: Letter Grading

POLT 602D - Internship
Credits: 2-12
Field experience in governmental or nongovernmental organization at the local, state, national, or international level. Arrangements must be made through the political science department. Open to juniors and seniors with at least 3.2 GPA. Permission from the undergraduate curriculum committee of the department is required. From 2 to 12 credits maybe taken.
Grade Mode: Credit/Fail Grading

POLT 695 - Independent Study
Credits: 2-4
Designed to meet special interests of students and instructors in exploring issues in political science. Upon satisfying eligibility requirements set forth by departmental guidelines (in departmental office and online), students must have the approval of a faculty sponsor. Students submit the form and all supporting evidence by mid-semester prior to the planned semester of independent study for departmental approval. Does not meet the major's four field-course requirement; maximum of eight (8) credits can be counted toward the non-field major requirements.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

POLT 696 - Independent Study
Credits: 2-4
Designed to meet special interests of students and instructors in exploring issues in political science. Upon satisfying eligibility requirements set forth by departmental guidelines (in departmental office and online), students must have the approval of a faculty sponsor. Students submit the form and all supporting evidence by mid-semester prior to the planned semester of independent study for departmental approval. Does not meet the major's four field-course requirement; maximum of eight (8) credits can be counted toward the non-field major requirements.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

POLT 700 - Political Science Pro-Seminar
Credits: 4
Familiarizes students with political science as a profession. Briefly surveys the scope of the discipline in terms of the substantive fields and methodological approaches. Examines the logic of research design and explores diverse methods of inquiry (e.g., archival, experimental, case study, comparative analysis, field study, survey, etc.), including the process of generating a presentable research paper.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 701 - Courts and Public Policy
Credits: 4
Impact of judicial decisions on public policy and influences on judicial decision making at the federal, state, and local levels.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 705 - Elections in the United States
Credits: 4
Students will study various aspects of elections in the United States while observing and analyzing case studies during campaign season.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 709 - Reforming American Government
Credits: 4
Why is American government designed the way that it is (and how does it change?)? Whose interests are protected and whose interests are limited by its design? What do successful reforms tell us about the future of reform?.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 721 - Feminist Political Theory
Credits: 4
Familiarizes students with trends feminist political thinking; exploring issues of race, ethnicity, class, religion/spirituality, sexual orientation, ability, age as they relate to gender and the development of feminist political theory. Attention is paid to critical thinking and analysis using the paradigm of gender as a prism through which to view our lives and ideas.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 740 - States and Societies in the Middle East
Credits: 4
This seminar explores the comparative politics of selected countries and conflicts in the contemporary Middle East and North Africa. We focus on understanding the causes and consequences of popular uprisings, civil wars, and protracted conflicts. The class is taught through discussion, with students taking active, participatory roles. Themes include changing forms of governance, changing practices of warfare, gender and minority rights, economic and environmental problems, protest and activism, state-society relations, and migration and refugees. Students read memoir, journalistic accounts, and theoretical articles in comparative politics to understand important developments. Specific country and issue cases change each year; recent seminars have addressed Israel-Palestine, Syria, Egypt, Iran, and Iraq. Writing, reading, and discussion intensive class. Designed as follow-on course to POLT 559, Comparative Politics of the Middle East, counts as capstone course for the Middle East Minor.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 742 - Beyond Bollywood: Politics of India & South Asia
Credits: 4
India and its neighbors in South Asia - Afghanistan, Pakistan, Bangladesh, and more - are critical to understand. In particular, Pakistan and Afghanistan’s complicated relationship with terrorist organizations hold important implications for global stability. This course explores India and the rest of South Asia’s domestic politics and their complex relations with each other and the rest of the world. As suggested in the title, some of the course material will include movies and documentaries of and about the region to understand the region through its own eyes.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 748 - Food and Wine Politics
Credits: 4
Food and wine politics provides a lens through which to analyze contrasting perspectives on production organization, market structures, quality constructs, consumer preferences, and health and safety regulation. This course draws upon texts from economic history, political economy, economic sociology, and public policy to shed light on comparative political and market organization across Europe, the United States, and emerging market economies.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 751 - Comparative Environmental Politics and Policy
Credits: 4
This seminar explores environmental politics comparatively, across national boundaries and over time. The course aims to provide students with a basic theoretical understanding of key themes in comparative politics as applied to the study of environmental politics and policy. We explore these issues by comparing governments, political parties, social movements, economic development paths, and systems of energy production and consumption, with particular focus on questions of environmental justice and inequality. The approach is interdisciplinary, as the politics of the environment cannot be adequately grasped through one discipline. Independent projects allow students to incorporate themes, concepts, and analytical tools provided in the course to pursue their own interests.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 760 - Theories of International Relations
Credits: 4
Theoretical approaches of international politics, international organization, and international political economy with particular emphasis on systems theories, domestic determinants of foreign policy and theories of decision making.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 762 - International Political Economy
Credits: 4
This course has been designed to introduce advanced undergraduates and graduate students to the current theoretical discussions in international political economy. The course analyzes the development of current international economic regimes, as well as looks at systemic theories (interdependence, hegemonic stability), domestic determinants (bureaucratic, interest group), and decision-making theories (rational choice). By monitoring current economic and political news, students are challenged to apply these ideas to explain the current problems in political economy.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 778 - International Organization
Credits: 4
This course is about cooperation at the international level. With a focus on international organizations, we examine what roles international institutions (both IGOS and NGOS) play in global governance and their effects in various issue areas. We examine their historical origins, functions, and the international and domestic political forces that impact their effectiveness. The course also considers the role of international organizations on world order including conflict resolution, peacekeeping, development, and human rights.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 779 - Technology and War
Credits: 4
How does weapons technology affect how states fight and the ways in which international politics work? This course considers the relationship between technology and war by considering three key questions: in what context did different weapons develop? have any weapons had a revolutionary effect on war? how have different war strategies changed the conduct of international politics? We will consider the development and effects of weapons including gunpowder, tanks, submarines, nuclear weapons, and drones. Students will leave this course with a greater understanding of the systemic pressures and individual variables that affect technological development and diffusion, and an understanding of how those technologies are used in pursuit of international political goals. Students will also learn how to write a substantial research paper. Every student will leave this class with a 3-5 page writing sample to use for future internship and job applications. As a seminar, this is a writing- and participation-intensive course. Students are expected to complete various types of writing, including weekly discussion posts and multiple types of papers. There is also a significant professionalization component to this course, including an emphasis on proper email communication!
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 795 - Advanced Study
Credits: 1-4
Senior POLT majors, with a cumulative average of 3.20 or greater, may undertake advanced study (political science), in an area of their choice, in consultation with member(s) of the faculty. Normally, the result of the project is a significant written product of a quality comparable to that done at the 700 course level. Student must initiate the project discussion and obtain approval of the undergraduate curriculum committee of the department before undertaking the project.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 796 - Advanced Study
Credits: 4
Senior POLT majors, with a cumulative average of 3.20 or greater, may undertake advanced study (political science), in an area of their choice, in consultation with member(s) of the faculty. Normally, the result of the project is a significant written product of a quality comparable to that done at the 700 course level. Student must initiate the project discussion and obtain approval of the undergraduate curriculum committee of the department before undertaking the project.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 797B - Seminar in American Politics
Credits: 4
Advanced analysis and individual research.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 797C - Seminar in Comparative Politics
Credits: 4
Advanced analysis focusing on government and politics in foreign nations or regions. Areas of interest may include: constitutional structures, political parties and interest groups, legislatures, bureaucracy, and public policy. Topics address such concerns as religion and politics, patterns of economic development, ethnic strife, and political leadership.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 797E - Seminar in International Politics
Credits: 4
Advanced analysis focusing on problems of theory and contemporary issues in international politics. Areas of interest may include: democratic norms in international relations, NATO expansion and European security, the peace process in the Middle East, etc. See department listings for semester offerings.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 798B - Seminar in American Politics
Credits: 4
Advanced analysis and individual research.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

POLT 799 - Honors Thesis
Credits: 4
Senior POLT honors-in-major students (see department for honors-in-major requirements), with a cumulative average of 3.20 or greater, may undertake a special honors project in an area of their choice. The result of this special project is a significant written product constituting an honors thesis, under the supervision of a faculty sponsor. Students must initiate the project discussion and obtain approval of the undergraduate curriculum committee before undertaking the project. The honors thesis constitutes the tenth course in the major.
Attributes: Honors course; Writing Intensive Course
Grade Mode: Letter Grading

Politics and Society (PS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PS 402 - Practical Politics
Credits: 4
With particular attention to the development and evolution of US political institutions over time, this course seeks to help students understand how national politics affects them and their communities and how they can, in turn, use that insight to affect national politics. We will work to develop not just new knowledge, but to foster tools and practices of civic engagement.
Attributes: Historical Perspectives(Disc)
Mutual Exclusion: No credit for students who have taken POLT 402.
Grade Mode: Letter Grading

PS 425 - Exploring Leadership
Credits: 1-4
Exploring Leadership is an introductory course on the foundations of student development and leadership, with an emphasis on applying the formal literature on leadership to help students develop and articulate their own personal philosophy of leadership and enact a leadership action plan for their club/organization/leadership position. no credit for students who have taken.
Equivalent(s): UMST 525
Grade Mode: Letter Grading

PS 426 - Social Justice & Leadership
Credits: 1-4
An exploration of social justice through personal and institutional lenses to analyze power and privilege, discrimination and prejudice, inclusion and equity through the intersections of multiple social identities to develop student leaders who will promote an equitable and inclusive environment and serve as social change agents in the college and community.
Equivalent(s): UMST 526
Grade Mode: Letter Grading

PS 430 - The Mindful Leader
Credits: 2
Research has shown that mindfulness and emotional intelligence positively impact leadership, job performance and satisfaction, and work-life balance. This course will introduce students to mindfulness and emotional intelligence through research, discussion, and personal experience. Students will explore how to lead mindfully and develop their emotional intelligence to better manage personal and professional stress and support a culture of vulnerability, non-judgment, and being in the present moment. This course is open to all undergraduate students. Credit cannot be earned if taken UMST 599: The Mindful Leader.
Grade Mode: Letter Grading

PS 500 - Wicked Problems: Puzzles in Public Policy
Credits: 4
Meaningful change in the US is difficult under the best of circumstances, and it's almost never the best o circumstances. As a result, the richer your understanding of the complex and often irrational US policy-making system, the better the chance that you will be able to understand why certain policies are made (or not made), why they take the form that they do, and how to alter them.
Attributes: Social Science (Discovery); Writing Intensive Course
Mutual Exclusion: No credit for students who have taken POLT 500.
Grade Mode: Letter Grading

PS 506 - Civil Society and Public Policy
Credits: 4
Explores how grassroots advocacy organizations and social movements mobilize human and material resources in order to shape public policy and what tactics and organizational and communication strategies lead to success. Provides students with hand-on learning through service learning project at a local organization. Policy areas may include immigration, environmental conservation, women's issues and more.
Grade Mode: Letter Grading

PS 515 - New Hampshire Politics in Action
Credits: 4
A hands-on course on New Hampshire politics and policymaking, in which students will identify a Bill currently active in the NH General Court and develop and execute a step-by-step plan for helping get it enacted or defeated. Periodic travel to the State Capitol in Concord will be required.
Attributes: Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

PS 595 - Research for Political and Policy Action
Credits: 4
This course offers an overview of how the social sciences--political science especially--decide which questions to ask and how to design the research projects that will help them develop answers to those questions. As we explore these methods of inquiry and analysis, students undertake their own multi-methods research project to better understand something that interests or puzzles them while experiencing first hand the challenges inherent in sound research.
Attributes: Inquiry (Discovery); Writing Intensive Course
Mutual Exclusion: No credit for students who have taken POLT 595.
Grade Mode: Letter Grading

PS 701 - Senior Seminar/Internship in Public Service
Credits: 4
Students undertake internships or other approved field projects with organizations such as political campaigns, media organizations, government offices, business or community groups. The seminar component enables students to share and analyze these experiences, employing readings, discussions, collective behavior games, and speakers.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

PS 731 - Community Leadership - Capstone
Credits: 4
Culminating experience for the Community Leadership Minor, but open to other students with instructor's permission. Working alone or in groups, students will design and execute a project of benefit to a community partner.
Equivalent(s): UMST 531, UMST 701
Grade Mode: Letter Grading

Portuguese (PORT)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

No courses are currently active in the course inventory for this subject prefix.

Professional and Technical Communication (PTC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PTC 500 - Business Communication
Credits: 4
This course focuses on writing skills used in the business world. Frequent writing assignments include letters, emails, reports and resumes. The drafting, feedback and revision method is used. Required for the BUS degree and should be taken within the first 2 semesters. No credit if ENGL 595 "Literary Topics: Business Communications" taken.
Attributes: Writing Intensive Course
Prerequisite(s): ENGL 401 with a minimum grade of D- or ENGL 401A with a minimum grade of D-.
Grade Mode: Letter Grading

Project Management (PM)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PM 611 - Advanced Project Management
Credits: 4
This course builds on the foundation of MGMT 626 by introducing coverage of advanced topics in project scheduling, risk and quality management, and cost control as well as providing comprehensive knowledge of scheduling and other project management tools. The course also addresses the appropriate use and application of Agile Project Management.
Prerequisite(s): MGMT 626 with a minimum grade of D-.
Grade Mode: Letter Grading

PM 613 - Organizational Behavior and Projects
Credits: 4
This course details the relationship between the organizations that host the projects and the projects themselves. Projects are a key vehicle for the execution of organizational strategy, and the effectiveness of that execution is determined to a large extent by the environment that the organization itself creates for those projects. This course addresses topics including project organization and context, strategic project management, and ethics and professionalism. It also explores the benefits of implementing a project portfolio management practice within an organization.
Prerequisite(s): PM 611 with a minimum grade of D-.
Grade Mode: Letter Grading

Psychology (PSY) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PSY 410 - Introduction to Psychology
Credits: 4
This survey course provides an introduction to the science of psychology. It examines many of the major areas of applied and experimental psychology. A selection of topics from the following specialty areas are covered: History of Psychology, Research Methods, Biological Psychology, Cognition, Learning, Memory, Human Development, Stress, Emotion, Health Psychology, Personality Theories, Psychopathology, and Social Psychology. Students will apply knowledge of these topics to interpret personal experiences, current events, societal issues, and practical problems.
Attributes: HumanBehavSocial Sys (Gen Ed); Social Science (Discovery)
Equivalent(s): PSY 501G
Mutual Exclusion: No credit for students who have taken PSYC 401.
Grade Mode: Letter Grading

PSY 470 - Child Development
Credits: 4
This course focuses on the development of children from birth to early adolescence. It includes the major developmental theories and perspectives as well as an overview of the research methodology used in the field. Through reflective writing, current research in the areas of physical, cognitive, and social and emotional development is explored in the context of the child's environment.
Attributes: HumanBehavSocial Sys (Gen Ed)
Equivalent(s): PSY 508G
Mutual Exclusion: No credit for students who have taken PSYC 581.
Grade Mode: Letter Grading

PSY 480 - Infant and Toddler Development
Credits: 4
This course focuses on major theoretical perspectives of child development with particular attention to infant and toddler development. Topics include the physical, social, emotional, and cognitive milestones of the growing child along with factors that contribute to optimal development. There is an emphasis on the importance of creating high quality, safe, and supportive environments as well as on attachment and the role of communication in the development of trust and autonomy. Students observe children to develop strategies for creating and maintaining developmentally appropriate environments. Prior completion of PSY 525 or PSY 470 recommended.
Attributes: HumanBehavSocial Sys (Gen Ed)
Equivalent(s): PSY 510G
Grade Mode: Letter Grading

PSY 525 - Human Development
Credits: 4
This course focuses on the development of the individual from conception to death. Major developmental theories, milestones, processes, and influences are covered. Research findings about these topics are examined. Growth and development are viewed as products of interacting biological, psychological, and social factors. The risks and opportunities in the developing person's social environment, as well as the application of theories and research findings, are emphasized.
Attributes: HumanBehavSocial Sys (Gen Ed); Social Science (Discovery)
Equivalent(s): PSY 509G
Grade Mode: Letter Grading

PSY 530 - Social Psychology
Credits: 4
Social Psychology is the scientific study of how individuals, groups, organizations, and culture influence and are influenced by their social environment. This course provides an overview of classic and contemporary work in this field and explores topics such as aggression, attitude formation and change, social thinking, individual and group influence, prejudice, friendships and romantic relationships, leadership, social influence, altruism, and/or conformity.
Attributes: HumanBehavSocial Sys (Gen Ed); Social Science (Discovery)
Equivalent(s): PSY 502G, PSY 608G
Mutual Exclusion: No credit for students who have taken PSYC 552.
Grade Mode: Letter Grading

PSY 550 - Fundamentals of Applied Behavior Analysis
Credits: 4
This course serves as an introduction to the foundational concepts and principles of applied behavior analysis (ABA) with an emphasis on the skills from the Behavior Analyst Certification Board's (BACB) Registered Behavior Technician (RBT) Task List. It provides students with the opportunity to examine how the principles of basic measurement, assessment, skill acquisition, behavior reduction, and professional conduct are applied in ABA settings. Students will also review the development and history of applied behavior analysis.
Prerequisite(s): (PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D-) and (IDIS 560 with a minimum grade of D- or IDIS 501G with a minimum grade of D-).
Grade Mode: Letter Grading

PSY 565 - Core Principles of Addiction
Credits: 4
This course introduces students to the basic issues discussed by addiction support workers, including the Twelve Core Functions of the alcohol and other drug (AOD) counselor. Students will also have an opportunity to explore the possible professional certifications (e.g., Certified Recovery Support Worker (CRSW), Licensed Alcohol and Drug Counselor (LADC), etc.) within this career. A wide array of topics related to addiction may be discussed in this beginning-level course. Topics may include the economic, political, and/or cultural consequences of addiction and potential consequences of addiction on the individual's relationships, mental health, and physical health.
Equivalent(s): PSY 515G
Grade Mode: Letter Grading

PSY 602 - Theories of Personality
Credits: 4
This course examines specific theories of personality for the purpose of explaining normal and abnormal development and behavior. Psychoanalytic, trait, humanistic, existential, cognitive, behavioral, and social learning theories, among others, are reviewed and critiqued based on research evidence. Each theory or theoretical perspective is presented in terms of historical context, basic assumptions, and hypothetical constructs. Students explore behaviors and motivations from the perspective of different personality theories. The application of personality theories in helping-profession contexts is introduced.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D-.
Equivalent(s): PSY 602G
Mutual Exclusion: No credit for students who have taken PSYC 553.
Grade Mode: Letter Grading

PSY 603 - Crisis Intervention
Credits: 4
This course focuses on crisis theory, methods of crisis intervention, and specific crises that occur with individuals and families such as suicide, unemployment, natural disasters, illness, divorce, and death. Students are expected throughout the course to apply their exploration of theory to their work and life experiences.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D-.
Equivalent(s): PSY 603G
Grade Mode: Letter Grading

PSY 620 - Behavioral Assessments and Interventions in Applied Behavior Analysis I
Credits: 4
This course provides students with the opportunity to apply basic knowledge of assessments and use assessment results to inform intervention plans. Students will learn about various assessments used to address maladaptive behaviors, as well as skill development for replacement behaviors. Research methods for summarizing and analyzing data and single-subject experimental designs will also be studied.
Prerequisite(s): PSY 550 with a minimum grade of D-.
Grade Mode: Letter Grading

PSY 626 - Educational Psychology
Credits: 4
This course focuses on the study of teaching and learning, including several theoretical perspectives specific to human and cognitive development. Course topics include motivation, critical thinking, student assessment and achievement, and implications of approaches to each. The course critically examines the relationship between research and education, including the contributions and limitations of measurement in instructional settings and the interplay with educational policy.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): (IDIS 560 with a minimum grade of D- or IDIS 501G with a minimum grade of D-) and (EDC 500 with a minimum grade of D- or EDU 510G with a minimum grade of D- or PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D- or PSY 525 with a minimum grade of D- or PSY 509G with a minimum grade of D-).
Equivalent(s): PSY 606G
Grade Mode: Letter Grading

PSY 630 - Psychology of Adulthood
Credits: 4
This course is a life-span developmental approach to adulthood in contemporary American society that includes the major theoretical perspectives regarding developmental transitions and age-related tasks. The following topics are included: 1) methodological issues related to the study of development, 2) patterns of stability and change across adulthood with regard to processes such as biological functioning, sensation and perception, cognition, personality, identity, gender and social roles, relationships, career, and mental health, and 3) death and dying as the final stage of life. Students can consider their own development in light of this content.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D-.
Equivalent(s): PSY 615G
Grade Mode: Letter Grading

PSY 646 - Psychology of Occupational Stress
Credits: 4
This course focuses on occupational stress research, including the identification of organizational and psychosocial sources of stress. It defines workplace stress and eustress and explores factors including work environments, stress perception, diversity stress, personality, and interpersonal relationships with managers, staff, and co-workers. This course evaluates measurement tools, prevention and remediation strategies for individuals and organizations, and other approaches that create healthy workplaces. Each area is examined from the individual worker's perspective and that of management. Learners apply the major theoretical principles and processes to their own experiences as employees, employers, or military personnel.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D- or ECO 470 with a minimum grade of D- or ECO 512G with a minimum grade of D- or MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D- or PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D- or PSY 525 with a minimum grade of D- or PSY 509G with a minimum grade of D- or PSY 502G with a minimum grade of D- or PSY 530 with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D-.
Equivalent(s): PSY 616G
Grade Mode: Letter Grading

PSY 654 - Counseling Theories
Credits: 4
This course provides an overview of counseling theories developed by major theorists. The course examines how both the historical context and the scientific knowledge of the time helped to shape the theories developed during the past century. Research findings evaluating the effectiveness of therapeutic modalities are reviewed. Important elements of the counseling process, which include assessments, confidentiality, the therapeutic alliance, and the impact of funding sources on decision making, are examined.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D-.
Equivalent(s): PSY 604G
Grade Mode: Letter Grading

PSY 660 - Ethics in Applied Behavior Analysis
Credits: 4
This course reviews ethical standards of practice within the field of applied behavior analysis and how these standards are used within applied settings. This course will also address preparing practitioners for supervisory responsibilities. Students will have the opportunity to propose methods for applying the Guidelines for Responsible Conduct from the Behavior Analyst Certification Board in a variety of practical client situations.
Prerequisite(s): PSY 550 with a minimum grade of D-.
Grade Mode: Letter Grading

PSY 665 - Principles of Assessment
Credits: 4
This course is a survey of assessment issues and methods for students pursuing studies in education-related fields or the behavioral sciences. Topics include differences between formal and informal assessment and evaluation, reliability and validity, differences between norm-referenced and criterion-referenced tests, development of assessment and evaluation instruments and plans, methods for observing and recording behavior, and how to use assessment information to develop and/or modify programs and environments. NOTE: MTH 402 or MTH 504 is recommended.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D-.
Equivalent(s): PSY 605G
Grade Mode: Letter Grading

PSY 675 - Foundations of Addictions Counseling
Credits: 4
This course provides students with an opportunity to study the important theories, strategies, and skills of addictions-related counseling. Topics are derived from the Twelve Core Functions of Addiction Counselors and will include concepts like screening, referral, intake, assessment, crisis management, treatment, recovery, support, and/or client education.
Prerequisite(s): PSY 565 with a minimum grade of D- or PSY 515G with a minimum grade of D-.
Equivalent(s): PSY 625G
Grade Mode: Letter Grading

PSY 685 - Principles of Psychopathology
Credits: 4
The focus of this course is on the societal definitions and impact of abnormal and deviant behavior, and what is considered psychopathology. It examines both how mental illness is recognized and regarded, and how its treatment may vary, in different societies and cultures. It deals with major disorders and personality syndromes considered to be abnormal or deviant and examines the various etiologic factors known or believed to play a role in each of the disorders, considering them from varying perspectives, such as psychoanalytic, cognitive behavioral, biological, and humanistic.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D-.
Equivalent(s): PSY 617G
Mutual Exclusion: No credit for students who have taken PSYC 561.
Grade Mode: Letter Grading

PSY 710 - The Biology of Addiction
Credits: 4
This course introduces the biological mechanisms of substance use and misuse (e.g., nervous system activity, tolerance, withdrawal, and metabolism) and the resulting behavioral and health consequences. Students will also examine the classification of various substances, epidemiological data and trends, the diagnoses and diagnostic criteria of substance use disorders, genetic and biological influences on addiction, and biological theories of addiction. Other potential topics include behavioral addictions (e.g., gambling, eating, video games, or sex) and the effects of drugs on individuals, families, and society.
Attributes: Phys Natural World (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D-.
Equivalent(s): PSY 610G
Mutual Exclusion: No credit for students who have taken PSYC 733.
Grade Mode: Letter Grading

PSY 720 - Behavioral Assessments and Interventions in Applied Behavior Analysis II
Credits: 4
This course extends the student's initial inquiry into behavioral assessments and interventions beyond the prerequisite course to practice advanced techniques. Students will appraise the needs of case-based situations, then select intervention strategies inclusive of shaping, discrimination training, instructional control, imitation training, and differential reinforcement. Behavior change will be addressed across settings and populations.
Prerequisite(s): PSY 620 with a minimum grade of D-.
Grade Mode: Letter Grading

PSY 725 - Cognitive Psychology
Credits: 4
This course introduces some of the major topics related to human cognition, including perception, attention, memory, knowledge acquisition, language, problem solving, reasoning, and decision making. Students will explore the historical context, current theories, neurobiological underpinnings, research methods, and empirical research relevant to the field of cognitive psychology. Comprehension will be enhanced through the application of cognitive principles to understand everyday behavior and solve practical problems.
Attributes: HumanBehavSocial Sys (Gen Ed); Writing Intensive Course
Prerequisite(s): IDIS 560 with a minimum grade of D- or IDIS 501G with a minimum grade of D-.
Equivalent(s): PSY 609G
Mutual Exclusion: No credit for students who have taken PSYC 513.
Grade Mode: Letter Grading

PSY 740 - Biopsychology
Credits: 4
This course addresses the relationship between the brain and behavior to provide an overview of the biological basis of thoughts, actions, and feelings. Topics may include basic functional neuroanatomy and physiology, sleeping and dreaming, emotion, biopsychological research methods, learning and memory, development of the brain, sensation and perception, motor control, language and lateralization, substance use and neuropharmacology, emotion, and behavioral health problems (for example, stress-related disorders, anxiety, depression, or schizophrenia) and their pharmacological treatment. Comprehension will be enhanced through the application of biopsychological principles to understand everyday behavior and solve practical problems. NOTE: SCI 490 recommended.
Attributes: Phys Natural World (Gen Ed); Writing Intensive Course
Prerequisite(s): IDIS 560 with a minimum grade of D- or IDIS 501G with a minimum grade of D-.
Equivalent(s): PSY 601G, SCI 600G
Mutual Exclusion: No credit for students who have taken PSYC 531.
Grade Mode: Letter Grading

PSY 795 - Integrative Capstone: Internship in Applied Psychology
Credits: 4
This capstone course is a field-based internship designed to develop and hone the practical application skills of an Applied Psychology major. The course requires students to integrate the knowledge and skills gained from other courses in the program and to demonstrate the ability to apply their knowledge to new subject matter and practical situations. Students apply for an internship at a self-selected site and negotiate the terms of the internship experience with a site supervisor under the auspices of their faculty mentor. The internship requires documented evidence of eighty hours of supervised experience and practice in a field setting where psychology-related knowledge and skills are applied. NOTE: Registration for this course, an internship, is by permission of Academic Affairs. Early registration deadlines may apply. Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): BEHS 651G
Grade Mode: Letter Grading

PSY 797 - Integrative Capstone: Project in Applied Psychology
Credits: 4
This capstone course in applied psychology requires students to integrate the knowledge and skills gained from other courses in the program and to demonstrate the ability to apply their knowledge to new subject matter and practical situations. Students will complete an independent project that requires conducting scholarly research on a chosen topic, critically evaluating the relevant literature, and synthesizing peer-reviewed sources into a scientific paper that conforms to APA formatting standards. Students will become familiar with the APA ethical standards regarding human research, and students choosing to conduct an empirical study collecting data from human participants will be required to undergo a review and approval process by the Institutional Review Board (IRB). Prior to capstone enrollment, students are expected to complete the majority of their required major courses. Students should consult with their advisor regarding specific major courses that may be completed with their capstone. NOTE: Students who were admitted to the college before Fall 2019 and have remained active in their original catalog year are not required to take IDIS 601.
Attributes: Writing Intensive Course
Prerequisite(s): (CRIT 602 with a minimum grade of D- or CRIT 602G with a minimum grade of D- or CRIT 502G with a minimum grade of D-) and (IDIS 601 with a minimum grade of D- or IDIS 601G with a minimum grade of D-).
Equivalent(s): BEHS 650G
Grade Mode: Letter Grading

Psychology (PSYC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PSYC 400 - Psychology Freshmen Advising Seminar
Credits: 1
This course is an introduction to our program, the various areas of Psychology and faculty research, some employment opportunities after graduation, academic standards, and management skills essential for success as a declared psychology major in the University. The goal of this course is to help students make a positive academic transition into UNH. Students will learn about the resources UNH has to offer to support their success and how to navigate UNH academic planning tools. This course will introduce students to the different areas of psychology and expectations for a psychology major. This course is required for all first-year declared Psychology majors.
Grade Mode: Credit/Fail Grading

PSYC 401 - Introduction to Psychology
Credits: 4
Psychology as a behavioral science; its theoretical and applied aspects. Includes research methods, behavioral neuroscience, sensation and perception, cognition, learning, development, personality, psychopathology, and social psychology. To experience actively the nature of psychological research students have an opportunity to participate in a variety of studies as part of a laboratory experience.
Attributes: Social Science (Discovery)
Equivalent(s): PSYC 401H
Mutual Exclusion: No credit for students who have taken PSY 410.
Grade Mode: Letter Grading

PSYC 402 - Statistics in Psychology
Credits: 4
Design, statistical analysis, and decision making in psychological research. Probability, hypothesis-testing, and confidence intervals. Conceptualization, computation, interpretation, and typical applications for exploratory data analysis (including measures of central tendency, variability), t-tests, correlations, bivariate regression, one-way analysis of variance, and chi square. Introduction to computer methods of computation.
Attributes: Quantitative Reasoning(Disc)
Equivalent(s): PSYC 402H
Mutual Exclusion: No credit for students who have taken ADM 430, ADMN 420, ADMN 510, BIOL 528, EREC 525, HHS 540, HMP 540, MATH 439, MATH 539, MATH 644, MTH 504, MTH 701, SOC 402, SOC 402H, SOC 502, SOC 502H.
Grade Mode: Letter Grading

PSYC 440A - Honors/Understanding the Human Brain
Credits: 4
First, we will examine the evolution of the brains of hominids to understand what are characteristics are uniquely human and what are conserved across species. We then explore selected topics in neuroscience that alter neural functioning, for example, the impact of neuro-prosthetics, cognitive enhancement, racial discrimination. Finally, we will discuss the benefit and limitations of using animal models to understand human neural functioning.
Attributes: Biological Science(Discovery); Honors course
Grade Mode: Letter Grading

PSYC 502 - Research Methods in Psychology
Credits: 4
Research design, including experimental and correlation design; internal versus external validity; measurement; writing a research report; graphic and statistical methods for summarizing data; sampling; and special problems such as experimenter effects, reactivity of measurement, and others. The use of hypothesis testing and data analysis in research.
Attributes: Inquiry (Discovery); Writing Intensive Course
Prerequisite(s): PSYC 401 with a minimum grade of D- and PSYC 402 with a minimum grade of D-.
Equivalent(s): SOC 601, SW 601, SW 601W
Mutual Exclusion: No credit for students who have taken IDIS 560.
Grade Mode: Letter Grading

PSYC 511 - Sensation and Perception
Credits: 4
The study of how humans (and some other animals) sense and perceive their environment. Topics include seeing (vision), hearing (audition), tasting (gustation), smelling (olfaction), feeling (somatosensation), and the variety of state-of-the-art methods used by psychologists to study these senses. Illusions and other sensory and perceptual phenomena are treated.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 512 - Psychology of Primates
Credits: 4
A comparative analysis of primate cognitive, linguistic, and social processes. The origins of human behavior are explored from the perspectives of history, evolution, and contemporary work in neuropsychology, linguistic, sociobiology, and related fields.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 513 - Cognitive Psychology
Credits: 4
The study of human cognition, its basic concepts, methods, and major findings. Human knowledge acquisition and use. Attention, perception, memory, imagery, language, reading, problem solving, and decision making.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken PSY 725.
Grade Mode: Letter Grading

PSYC 521 - Behavior Analysis
Credits: 4
Principles derived from the experimental study of human and animal learning and their theoretical integration. Respondent and operant conditioning. Reinforcement and punishment, stimulus control, choice and preference, conditioned reinforcement.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 522 - Behaviorism
Credits: 4
Introduction to behaviorism as a philosophy of science. Some historical background, but concentration on modern behaviorism as exemplified in the works of B. F. Skinner. No credit for students who have completed PSYC 722. Offered only in Manchester.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 531 - Psychobiology
Credits: 4
Introduces the behavioral neurosciences. Surveys research conducted by psychologists to learn about the biological basis of behavior: development, sensation, perception, movement, sleep, feeding, drinking, hormones, reproduction, stress, emotions, emotional disorders, learning, and memory.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken PSY 740.
Grade Mode: Letter Grading

PSYC 552 - Social Psychology
Credits: 4
Behavior of individuals as affected by other individuals, groups, and society. Topics include attitude change and social influence, conformity, social interaction, interpersonal attraction, impression formation, research.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken PSY 530.
Grade Mode: Letter Grading

PSYC 553 - Personality
Credits: 4
Major theories, methods of assessment, and research.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken PSY 602.
Grade Mode: Letter Grading

PSYC 561 - Psychopathology
Credits: 4
Causes, diagnosis, and treatment of psychopathology. Implications of varying theoretical viewpoints.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken PSY 685.
Grade Mode: Letter Grading

PSYC 571 - Pioneers of Psychology
Credits: 4
An introduction to the development and evolution of psychology as an academic discipline and applied science. The lives and works of innovators in psychology are placed in socio-political context.
Attributes: Historical Perspectives(Disc)
Equivalent(s): PSYC 571H
Grade Mode: Letter Grading

PSYC 581 - Child Development
Credits: 4
The developing child in the context of his/her society. Current problems in, and influences on, development of the child. Personality and cognitive development; exceptional children.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken PSY 470.
Grade Mode: Letter Grading

PSYC 595 - Applications of Psychology
Credits: 1-4
Arranged by the student or offered by psychology faculty for supervised field, academic, or research experience related to psychology. A) Field experience: supervised internship at a business or human services setting, B) Academic experience: specialized classroom experience or supervised teaching assistance, C) Research experience: supervised research experience or laboratory work. Psychology instructors sponsor academic credit for appropriate experience combined with a relevant academic component. Requires a signed learning agreement prior to registration.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

PSYC 705 - Tests and Measurement
Credits: 4
Testing intelligence, creativity, achievement, interests, and personality. Test construction; evaluation; relation to psychological theory, research, and practice.
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Equivalent(s): PSYC 705H
Grade Mode: Letter Grading

PSYC 710 - Visual Perception
Credits: 4
The study of how humans (and some other animals) see. Topics include color vision, depth perception, form and pattern vision, visual learning and development, eye movements, diseases of the visual system, illusions, and other visual phenomena.
Attributes: Writing Intensive Course
Prerequisite(s): (PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and (PSYC 511 with a minimum grade of D- or PSYC 531 with a minimum grade of D-)) or (NSB 500 with a minimum grade of D- and NSB 501 with a minimum grade of D- and NSB 502 with a minimum grade of D- and NSB 503 with a minimum grade of D-).
Grade Mode: Letter Grading

PSYC 712W - Psychology of Language
Credits: 4
Theories of language structure, functions of human language, meaning, relationship of language to other mental processes, language acquisition, indices of language development, speech perception, reading.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and (PSYC 512 with a minimum grade of D- or PSYC 513 with a minimum grade of D-).
Equivalent(s): PSYC 712
Grade Mode: Letter Grading
Special Fee: Yes

PSYC 713 - Psychology of Consciousness
Credits: 4
Explores questions of consciousness What is it? How does it develop? Are infants and animals conscious? Why did consciousness evolve? Includes a review of historical background, including the ideas of Jaynes, Paiget, James, Freud, and others. Contemporary topics may include the role of language and other representational systems, blindsight, subliminal perception, priming and other implicit cognitive phenomena, hypnosis, confabulation and attribution, dreaming, multiple personality and conceptions of self and free will, from simultaneous perspectives of phenomenology, behavior, and neuroscience. Specific topics governed by class interests.
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 513 with a minimum grade of D-.
Equivalent(s): PSYC 713H
Grade Mode: Letter Grading

PSYC 713W - Psychology of Consciousness
Credits: 4
Explores questions of consciousness What is it? How does it develop? Are infants and animals conscious? Why did consciousness evolve? Includes a review of historical background, including the ideas of Jaynes, Paiget, James, Freud, and others. Contemporary topics may include the role of language and other representational systems, blindsight, subliminal perception, priming and other implicit cognitive phenomena, hypnosis, confabulation and attribution, dreaming, multiple personality and conceptions of self and free will, from simultaneous perspectives of phenomenology, behavior, and neuroscience. Specific topics governed by class interests.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 513 with a minimum grade of D-.
Equivalent(s): PSYC 713, PSYC 713H
Grade Mode: Letter Grading

PSYC 715W - MindCraft: Revolutions in Thinking about Thinking
Credits: 4
What does it mean to have a mind? What does it mean to think? These deceptively simple questions lie at the heart of this course. We explore diverse perspectives on the "mind", from long-standing philosophical debates to contemporary theories in psychology. By grappling with these questions, students consider how different answers shape the study of psychology, its methods, goals, and fundamental assumptions. The course emphasizes critical evaluation and challenges students to reflect on their own views about the nature of the mind. The semester is organized around three major themes: The mind–body problem: Whether, and in what sense, the mind is distinct from the brain. Through the history of psychological science, we compare behaviorism and cognitivism as contrasting approaches to studying the mind. Finally, we investigate probabilistic theories of cognition, which blend computation and psychology to address enduring questions about reasoning and thinking.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- or PSYC 502 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 720 - Animal Cognition
Credits: 4
Do animals use language or have a culture? Can birds count? Do animals use tools and understand how they function? How do ants navigate their environment to find food and then return to their nest? How animals perceive, attend to, process, store, and represent information from their environment. Research on animal learning and behavior as a framework for investigating cognitive processes in animal learning. Quantitative versus qualitative nature of differences between people and non-human animals. Multidisciplinary approach including the fields of anthropology, physiology, philosophy and biology.
Attributes: Writing Intensive Course
Prerequisite(s): (PSYC 401 with a minimum grade of D- and PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and (PSYC 513 with a minimum grade of D- or PSYC 521 with a minimum grade of D-)) or (NSB 500 with a minimum grade of D- and NSB 501 with a minimum grade of D- and NSB 502 with a minimum grade of D- and NSB 503 with a minimum grade of D-).
Grade Mode: Letter Grading

PSYC 722 - Behaviorism, Culture, and Contemporary Society
Credits: 4
Introduces behaviorism as a philosophy of science. Concentration on modern behaviorism as exemplified in the works of B.F. Skinner. Implications of behaviorism for the development and evolution of cultures. Consideration of societal issues (for example pollution, overpopulation, conflict, drug abuse) from a behavioral framework. No credit for students who have completed PSYC 522.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 521 with a minimum grade of D-.
Equivalent(s): PSYC 522
Grade Mode: Letter Grading

PSYC 731 - Brain and Behavior
Credits: 4
Neuropsychology, the study of brain/behavior relationships including clinical topics related to the analysis of neurological diseases in humans and more basic experimental topics related to integrative functions of the brain. The main focus is on cerebral cortex and functions related to perception, movement, attention, memory, and language.
Attributes: Writing Intensive Course
Prerequisite(s): (PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 531 with a minimum grade of D-) or (NSB 500 with a minimum grade of D- and NSB 501 with a minimum grade of D- and NSB 502 with a minimum grade of D- and NSB 503 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

PSYC 733 - Drugs and Behavior
Credits: 4
Introduces the principles of psychopharmacology and the effects of psychoactive substances on behavior. Focuses on the therapeutic and recreational use of drugs and the mechanisms of drug action, that is how the drugs affect the brain. Neuropsychiatric function and dysfunction are discussed as they relate to the use or abuse of particular drugs.
Attributes: Writing Intensive Course
Prerequisite(s): (PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 531 with a minimum grade of D-) or (NSB 500 with a minimum grade of D- and NSB 501 with a minimum grade of D- and NSB 502 with a minimum grade of D- and NSB 503 with a minimum grade of D-).
Mutual Exclusion: No credit for students who have taken PSY 710.
Grade Mode: Letter Grading

PSYC 735 - Neurobiology of Mood Disorders
Credits: 4
Neurobiological and neurochemical substrates underlying various psychopathologies, using both animal models and human data. Study of disorders from the field of biological psychiatry including aggression, anxiety, panic disorder, obsessive-compulsive disorder, unipolar depression, bipolar affective disorder, schizophrenia, and post-traumatic stress disorder. The effectiveness of current behavioral and pharmacological therapy.
Attributes: Writing Intensive Course
Prerequisite(s): (PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 531 with a minimum grade of D-) or (NSB 500 with a minimum grade of D- and NSB 501 with a minimum grade of D- and NSB 502 with a minimum grade of D- and NSB 503 with a minimum grade of D-).
Grade Mode: Letter Grading

PSYC 736 - Attention Disorders
Credits: 4
Attention encompasses several cognitive functions including, but not limited to, the ability to select relevant from irrelevant stimuli, to maintain goal-directed behavior over time, and to process multiple streams of information at once. This course explores how the normal brain "attends", and the consequences of dysfunction in neurochemical systems hypothesized to mediate these abilities including dementia, attention-deficit hyperactivity disorder (ADHD) and schizophrenia.
Attributes: Writing Intensive Course
Prerequisite(s): (PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 531 with a minimum grade of D-) or (NSB 500 with a minimum grade of D- and NSB 501 with a minimum grade of D- and NSB 502 with a minimum grade of D- and NSB 503 with a minimum grade of D-).
Grade Mode: Letter Grading

PSYC 741W - Special Topics
Credits: 4
New or specialized courses are presented under this listing. Advanced material not normally covered in a regular course in which instructor has specialized knowledge through research and study. May be repeated for different topics.
Attributes: Writing Intensive Course
Prerequisite(s): (PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-) or (NSB 500 with a minimum grade of D- and NSB 501 with a minimum grade of D- and NSB 502 with a minimum grade of D- and NSB 503 with a minimum grade of D-).
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): PSYC 741, PSYC 741A, PSYC 741B, PSYC 741C, PSYC 741D
Grade Mode: Letter Grading

PSYC 755 - Psychology and Law
Credits: 4
Applications of psychology to the study of the law, including theories of legal and moral judgment, participants in the legal system (judges, police, victims, witnesses), the trial process, and plea bargaining. Special focus on the death penalty, the insanity plea, and child witnesses.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Equivalent(s): PSYC 755H
Grade Mode: Letter Grading

PSYC 756 - Psychology of Crime and Justice
Credits: 4
Examines the psychological aspects of crime and justice, including the following origins and causes of crime: developmental, biological, biopsychological, learning, and mental disorder. Focuses on issues related to homicide, profiling, and serial killers. Examines aggression and violence as well as causes and consequences of criminal homicides. Discussion of the future of crime.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 757 - Psychology of Happiness
Credits: 4
Overview of empirical research in Positive Psychology. We will discuss factors that may influence happiness and subjective well-being; and effects that well-being may have on other life outcomes such as physical health. Learning involves reading and writing about evidence from research and also experimental exercises (such as doing an act of kindness).
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 758 - Health Psychology
Credits: 4
Survey of current topics in health psychology, including social stress and the etiology of disease, Type A and other personality factors related to health, modification of risk factors, the practitioner-patient relationship, chronic pain, and the emotional impact of life-threatening illness.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 759W - Emotion and the Embodied Mind
Credits: 4
This course introduces the scientific study of emotions, including where they come from and how they shape our perception of the world around us. We will discuss the ways in which action and thought are grounded in ongoing bodily needs and activity, how the mind makes meaning of external and internal sensations, and how emotions both emerge from and shape these processes. This is a writing intensive course. You will be asked to engage critically with primary source articles reporting on original research and theory, including both classic and contemporary work in the science of emotion. You are expected to contribute to class discussions and submit regular written content based on these readings (details below). Primary goals of this course include improving scientific literacy, practicing critical thinking, and building effective communication skills.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 760W - Ecopsychology
Credits: 4
Ecopsychology is a theory of the relationship between humans and nature. Ecopsychology is a focus of interest within Division 34 (Society for Environmental, Population, and Conservation Psychology) of the American Psychological Association. We will explore the impact of people's relationships with the natural world, which includes land, waterways, plants, and animals. Different cultures will be studied as we explore people's relationships with nature. The significance of the ways in which people connect or disconnect with nature will be studied in relation to the effect on one's mental (and physical) health, behaviors, and worldviews. This is a writing intensive course that meets the requirement for a Group II 700 level / writing intensive course for the Psychology major. Within the Department of Psychology we have the three courses of Counseling, Health Psychology, and Psychology of Happiness, that address factors related to one's overall well-being. This course has an ecological context in which psychological health, the health of the earth, and culture are studied; this course complements those three courses. Ecotherapy, which is applied Ecopsychology, will be explored through empirical studies and other important writings. The Ecopsychology course is also part of the interdisciplinary Native American and Indigenous Studies Minor at UNH.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 561 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 761W - Sport and Performance Psychology
Credits: 4
This is a writing intensive course that is an introduction to sport and performance psychology. It is a comprehensive study that is informed by current research and contemporary practice in the field of sport and performance psychology. We will explore learning, motivation and social interaction in sport, mental training skills for performance enhancement, and the enhancement of health and well-being for the athletes through sport psychology. The prevention and reporting of misconduct and abuse within sport is discussed. We will also consider the application of mental training skills for optimal performance outside of the context of sport. Students will be expected to develop a psychological skills training program as part of this course.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 762 - Counseling
Credits: 4
Theories of counseling, ethical considerations, professional and paraprofessional activities in a variety of work settings.
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and (PSYC 553 with a minimum grade of D- or PSYC 561 with a minimum grade of D-).
Grade Mode: Letter Grading

PSYC 762W - Counseling
Credits: 4
Theories of counseling, ethical considerations, professional and paraprofessional activities in a variety of work settings.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and (PSYC 553 with a minimum grade of D- or PSYC 561 with a minimum grade of D-).
Grade Mode: Letter Grading

PSYC 764W - Clinical Child Psychology
Credits: 4
A developmental perspective on psychopathology. The first half of the course will cover psychological disorders commonly observed in children and adolescents (emotional and behavioral disorders, Autism Spectrum Disorder, Attention Deficit-Hyperactivity Disorder, etc.). The second half of the semester will include an overview of child and family-focused treatments for childhood psychopathology, involving counseling skills practice specific to children and families.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 581 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 782W - Autobiographical Memory
Credits: 4
This course will explore autobiographical memory from a lifespan developmental perspective. Topics include flashbulb memories; the origins of personal memory in infancy and early childhood; memory and trauma; exceptional memory abilities; memory and the self; memories of life transitions; false memories; and gender and cultural differences in memory performance. Classes will be discussion-based and interactive.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 785 - Social Development
Credits: 4
Examines development of social interactions. Emphasizes important social relationships for the child (e.g., attachment to parents and friendships with peers). Considers other topics of relevance to social developmentalists, such as temperament, aggression, social cognition, and sex roles.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 581 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 791 - Special Topics
Credits: 4
New or specialized courses are presented under this listing. Advanced material not normally covered in a regular course in which instructor has specialized knowledge through research and study. May be repeated for different topics.
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 16 credits. May be repeated up to 4 times.
Equivalent(s): PSYC 791W
Grade Mode: Letter Grading

PSYC 791W - Special Topics
Credits: 4
New or specialized courses are presented under this listing. Advanced material not normally covered in a regular course offering in which instructor has specialized knowledge through research and study. May be repeated for different topics.
Attributes: Writing Intensive Course
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Repeat Rule: May be repeated up to 4 times.
Equivalent(s): PSYC 791
Grade Mode: Letter Grading

PSYC 793 - Internship
Credits: 4-8
Supervised practicum in one of several cooperating New Hampshire mental health/rehabilitation facilities. Coursework knowledge applied to meaningful work and team experience. Commitment includes a negotiated number of weekly work hours and weekly seminars. Supervision by institution personnel and the instructor. A maximum of 4 credits may be applied to the Psychology major. Course applications accepted beginning in March for fall term and October for spring term.
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D- and PSYC 561 with a minimum grade of D- and PSYC 762 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 794 - Advanced Internship
Credits: 1-8
Supervised advanced practicum experience in co-operating New Hampshire mental health/rehabilitation facilities. Expands and builds on experiences and skills acquired in PSYC 793. Commitment includes a negotiated number of hours of work per week and participation in weekly seminars. Supervision done by institution personnel and instructor.
Prerequisite(s): PSYC 793 with a minimum grade of D-.
Grade Mode: Letter Grading

PSYC 795 - Independent Study
Credits: 1-4
A) Physiological, B) Perception;, C) History and Theory, D) Behavioral Analysis, E) Social, F) Cognition, G) Statistics and Methods, H) Experimental, I) Personality, J) Developmental, K) Counseling, L) Psychotherapy, M) Research Apprenticeship, N) Teaching of Psychology, O) Advanced Externship (content area to be determined). Arranged by the student with a psychology faculty sponsor. Learner/sponsor contract required. Minimum time commitment: three hours per credit per week.
Prerequisite(s): PSYC 402 with a minimum grade of D- and PSYC 502 with a minimum grade of D-.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): PSYC 795H, PSYC 795W
Grade Mode: Letter Grading

PSYC 797 - Senior Honors Tutorial
Credits: 4
For senior psychology honors students. Students propose honors theses under the supervision of psychology faculty. Theses proposed and begun in this course are completed in PSYC 799. (Typically offered in fall.)
Attributes: Honors course
Grade Mode: Letter Grading

PSYC 798 - Capstone
Credits: 0
This is a zero credit course to indicate on the transcript that the capstone requirement is fulfilled. PSYC majors only.
Grade Mode: Credit/Fail Grading

PSYC 799 - Senior Honors Thesis
Credits: 4
Under supervision of psychology department faculty members, students complete the honors projects proposed and begun in PSYC 797. The honors project, which should be empirical in nature, culminates in an oral presentation at the end of the semester. (Typically offered in spring).
Attributes: Honors course
Prerequisite(s): PSYC 797 with a minimum grade of D-.
Grade Mode: Letter Grading

Public Administration (PA)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PA 700 - Foundations and Theories of Public Administration
Credits: 4
The foundations and Theories of Public Administration will explore the theoretical foundations of public administration and their practical applications. It will look to the early literature that helped shape the field along with a contemporary perspective of public administration. Students will understand the theoretical foundations of public administration, understand the different roles of the public sector, understand the historical roots of public administration, and understand the applied aspects of public administration.
Grade Mode: Letter Grading

PA 709 - Organization and Management in Public and Nonprofit Sectors
Credits: 4
This course is about management theory and practice. It provides the opportunity to acquire the theoretical knowledge as well as the practical methods necessary to manage organizations in the public and nonprofit sectors. Embedded in this idea of management learning is the proposition that theory and practice of management are closely connected.
Grade Mode: Letter Grading

PA 718 - Nonprofit Management
Credits: 4
Nonprofits play a major role in our lives although we may not be aware of their influence. The nonprofit sector in the United States has grown exponentially over he past twenty-five years, more rapidly than the government and for-profit sectors, making it the fastest growing segment of our economy. This course provides students with a practical hands-on approach to the non-profit sector, its governance and management including finance, fundraising, personnel management, strategic planning, and risk management.
Grade Mode: Letter Grading

Public Administration (PADM) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PADM 500 - Introduction to Public Administration
Credits: 4
This course introduces concepts of effective leadership for public service programs in the governmental and public sectors. Students will have the opportunity to become acquainted with public administration and policy as fields of study, such as the nature of bureaucracy, public policy, allocation of resources and public budgeting, leadership, supervision, and organization of civil servants.
Equivalent(s): MGMT 501G, PADM 500G
Grade Mode: Letter Grading

PADM 600 - Public Policy Development and Implementation
Credits: 4
This course is an overview of policy formulation and administration in the context of U.S. federal, state, and local governments. The relationship between politics and administration is explored with reference to the classical policy/administration dichotomy. The content of this course aims to familiarize students with the public policy process, equipping students with analytical frameworks and practical tools to improve their engagement with the process through their work. By the conclusion of this course, students will have the opportunity to develop their knowledge and skills to effectively apply these tools as future elected public officials, public agency managers, policy analysts, and public service providers.
Attributes: Writing Intensive Course
Prerequisite(s): PADM 500 with a minimum grade of D- or PADM 500G with a minimum grade of D- or MGMT 501G with a minimum grade of D-.
Equivalent(s): PADM 600G
Grade Mode: Letter Grading

PADM 645 - Public Sector Budget and Finance
Credits: 4
This course examines public budgeting in the context of its institutional, procedural, and political dimensions. Students will have the opportunity to learn about budgeting, accounting, and financial management concepts and techniques necessary for planning, analysis, and decision making in government and public sector organizations. This course also presents an overview of budgetary reforms, budget theories and techniques, and comparative perspectives of federal, state, and local budgeting methods. Further topics may include types of budgets and budget reports; the budgeting process at the local, state, and federal levels; basic expenditure and revenue forecasting and analysis; and communication strategies for financial and budgetary matters.
Equivalent(s): PADM 610G
Grade Mode: Letter Grading

PADM 670 - Human Resources in the Public Sector
Credits: 4
This course will focus on human resources in public sector practices. The history and changing role of public sector human resource strategies will be explored by students to develop an understanding of how individuals from diverse backgrounds, interests, and skill sets can work together and contribute towards an organization's mission. Students will have the opportunity to build capacity to influence people both inside and outside of an organization, optimize the structure and culture of their organization, make effective decisions, resolve conflicts, and drive change for higher organizational performance. Further, students will be given the opportunity to develop and enhance their supervisory and leadership skills so they can manage and lead high-performing, successful organizations.
Attributes: Writing Intensive Course
Equivalent(s): PADM 615G
Grade Mode: Letter Grading

Public Policy (PPOL)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

PPOL 706 - Fundamentals of Policy Analysis
Credits: 4
This foundational course in public policy analysis will introduce students to the policymaking process. Students will learn about the connection between research and policy, and develop fundamental skills in research design. Tools and techniques for policy analysis will be explored. The importance of effectively conveying results to stakeholders will be discussed, and students will work in teams to design and present a substantial policy research and analysis project.
Grade Mode: Letter Grading

PPOL 712 - Strategies for Policy Impact
Credits: 4
This course explores how to develop and implement strategies that drive policy change. You will learn how to analyze various approaches to changing policy, consider context for the change (timing, climate for change, opposition) and then identify the most viable option to use to influence policy change. This class is about influencing change versus the mechanics of designing policy. Students will review different influence models, discuss which ones work best in various situations, and identify how influence models connect to campaigns that influence legislative and institutional policy. You will better understand policy change efforts by reviewing examples and learning the central elements of a successful endeavor. Finally, students, in teams, will choose their own adventure and create their own policy change strategy.
Grade Mode: Letter Grading

PPOL 722 - Media Strategy and Communication
Credits: 4
In this course, we will introduce contemporary media strategies and learn how to use them to influence public policy. We will focus on: Recognizing the dynamics of the news cycle and how to identify opportunities in a saturated media landscape; Developing a message and a strategy to convey the message; Writing to advance a message in different media; Verbal skills to deliver a policy message via TED talk, panel or news conference; Nuance and differences when interacting with TV, radio, print, and social social; Introducing and practicing interview skills for TV, video, radio, print, and online media; and Understanding the power of image and authenticity.
Grade Mode: Letter Grading

Race & Ethnic Studies (RES)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

No courses are currently active in the course inventory for this subject prefix.

Recreation Management & Policy (RMP)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

RMP 400 - Recreation Management and Policy Continuing Enrollment
Credits: 0
This course enables BS students to maintain continuous enrollment in RMP as part of their matriculation plan until after their degree is formally awarded.
Repeat Rule: May be repeated up to 2 times.
Grade Mode: Not graded

RMP 411 - Applied Recreation Risk Management
Credits: 3
This course prepares students to enter the recreation profession by focusing on foundational risk management principles, skills, and certifications. Topics include types of risk, personal and organizational risk awareness, first aid, CPR, AED, defensive driving, sexual harassment prevention, youth/child protection, and bloodborne pathogen management. By the end of the course, students will have the training and certification necessary to assume early-stage recreational leadership roles on and off campus.
Grade Mode: Letter Grading

RMP 444A - Taking the "Dis" out of Disability
Credits: 4
In contrast to the traditional view of disability as a defect, students learn how disability provides a unique vantage point on our world and can be perceived as an ordinary part of the twists and turns of life. Examines the history of social responses to disability, with an emphasis on the present day concepts of inclusion and self-determination. Students explore expressions of the disability experience through print and visual media.
Attributes: Social Science (Discovery); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

RMP 490 - Recreation & Tourism in Society
Credits: 4
This course provides an overview of the historical and philosophical framework for the comparison of concepts, theories, and the inter-relationships between factors (social, economic, political, psychological) that influence our recreation and tourism experiences. Students explore how recreation is reflected in arts, literature, history, philosophy, psychology, sociology, economics, and anthropology, and will be introduced to different delivery systems, as well as a variety of relevant professional associations and career opportunities.
Attributes: Social Science (Discovery)
Equivalent(s): RMP 490H
Grade Mode: Letter Grading

RMP 500 - Therapeutic Recreation Methods in Physical Rehabilitation Settings
Credits: 1
This course introduces students to a variety of assistive techniques, devices and equipment used in Therapeutic Recreation settings that allow individuals with illnesses and disabilities achieve maximum independence and functional capacity to maintain optimal health and leisure functioning. Students learn and apply skills in anatomical orientation and positioning, universal precautions, assistive technology and adapted equipment for recreation including manual, power, sports, and all-terrain wheelchairs, wheelchair mobility skills, proper body mechanics, transfer and lifting techniques, ambulation assists, and sighted guide techniques.
Co-requisite: RMP 503
Grade Mode: Letter Grading

RMP 501 - Diversity, Equity, Inclusion, and Justice for Recreation Services
Credits: 4
Required course for all students in the Department of Recreation Management and Policy. Presents and discusses the concepts of Diversity, Equity, Inclusion and Justice (DEIJ) of marginalized groups for recreation services (e.g., disability, gender, race, LGBTQIA+, etc.). Students will learn and apply DEIJ concepts to recreation policies, planning, programming, implementation, and evaluation practices. Emphasis on volunteer experiences (lab), classroom activities, lectures, discussions, and experiential learning.
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

RMP 502 - Foundations of Therapeutic Recreation
Credits: 4
History and professional concepts of therapeutic recreation and the roles and functions of the therapeutic recreation specialist.
Grade Mode: Letter Grading

RMP 503 - Therapeutic Recreation Rehabilitation Principles & Interventions
Credits: 4
Introduces the rehabilitation principles and recreational therapy interventions used by therapeutic recreation specialists to improve functioning for people with physical and cognitive impairments. Students learn and apply fundamental processes of clinical reasoning and treatment program planning to improve quality of life. A lab provides students with the opportunity to use a variety of assistive techniques, adaptive devices, and equipment to support individuals and achieve maximum independence and promote a healthy leisure lifestyle.
Co-requisite: RMP 500
Grade Mode: Letter Grading
Special Fee: Yes

RMP 504 - Therapeutic Recreation Mental Health Principles and Interventions
Credits: 4
Introduces mental health principles and recreational therapy interventions to improve functioning for people with emotional, social, and behavioral impairments. Students will learn and apply fundamental processes of clinical reasoning and treatment program planning to improve quality of life for persons with emotional, social, and behavioral impairments. Restricted to RMP majors.
Grade Mode: Letter Grading

RMP 505 - Therapeutic Recreation: Aging Services Principles & Interventions
Credits: 4
This course is designated to introduce the student to the field of therapeutic recreation and its nexus with the older adult population. We will explore the role leisure and recreation, in concert with the recreational therapist, plays in the well-being of older adults. Topics of study will include: Health Promotion and Prevention; Geriatric Syndromes, Chronic Health Conditions; Roles of Recreational Therapist in Geriatrics; Common Illness, Health Settings; and Interventions.
Grade Mode: Letter Grading

RMP 511 - Issues of Wilderness and Nature in American Society
Credits: 4
Provides students with an overview of the evolving relationship between wilderness/nature and American society. Examines the philosophy, ethics, and societal values in American society and its relationship to our natural wilderness. Recent issues are used as case studies in order for students to articulate, defend, and critique the ethical issues presented. Students are responsible for understanding and applying philosophical approaches developed by philosophers, writers, and activists associated with the wilderness, sustainability, biodiversity, hunting, suburban sprawl, environmental activism, endangered species, organic foods, and genetic engineering.
Attributes: Humanities(Disc)
Grade Mode: Letter Grading

RMP 515 - History of Outdoor Pursuits in North America
Credits: 4
Voluntary pursuits in the outdoors have defined American culture since the early 17th century. Over the past 400 years, activities in outdoor recreation an education have reflected Americans' spiritual aspirations, imperial ambitions, social concerns, and demographic changes. This course will give students the opportunity to learn how Americans' experiences in the outdoors have influenced and been influenced by major historical developments of the 17th, 18th, 19th and 20th, and early 21st centuries.
Attributes: Historical Perspectives(Disc)
Equivalent(s): KIN 515, OUT 515
Grade Mode: Letter Grading

RMP 557 - Program and Event Design
Credits: 4
This course introduces students to a range of approaches to recreation program and event design, and focuses on providing leisure experiences for all populations. Course topics include foundations of programming, program theories, needs assessment techniques, vision, mission, goals, and objectives, processes of group planning, public relations, program promotion, and program evaluation. Students will design and deliver a recreation program using a team approach.
Prerequisite(s): RMP 490 with a minimum grade of C.
Grade Mode: Letter Grading

RMP 559 - Tourism and Event Marketing
Credits: 4
This course prepares students to apply marketing principles and strategies to recreation programs and events, including procedures for developing marketing plans for recreation and event organizations. Course content includes planning the marketing mix, with a focus on the recreation or event product, price, place, and promotion. The course covers the application of marketing and communication strategies delivered through social and audio-visual media. The culminating project consists of a marketing and communication plan for a recreation/leisure service agency.
Prerequisite(s): RMP 490 with a minimum grade of C.
Grade Mode: Letter Grading

RMP 560 - Recreational Sport Management
Credits: 4
Explores and examines the theoretical foundations and basic skill methods, and techniques necessary for the effective and efficient delivery of recreational sport programs within a variety of collegiate, public, quasi-public, and private settings, agencies and/or organizations.
Grade Mode: Letter Grading

RMP 561 - Campus Recreation Applied Leadership
Credits: 2
This course will provide students with foundational understanding needed to lead and facilitate programs in campus recreation settings. Students will learn about the principles underlying campus recreation staffing, supervision, and program policies.
Grade Mode: Credit/Fail Grading

RMP 563 - Recreation Management and Policy Practicum
Credits: 3
Designed to provide first and second year RMP majors the opportunity to observe and practice leadership skills and risk management practices in clinical and community-based settings. Students complete a 45 hour practicum at an approved site. Successful completion of a practicum is prerequisite to the professional internship, RMP 764. Students are responsible for transportation and housing if required.
Prerequisite(s): RMP 490 with a minimum grade of C.
Repeat Rule: May be repeated for a maximum of 6 credits.
Grade Mode: Credit/Fail Grading

RMP 571 - Mountain Resort Practicum
Credits: 3
Designed to provide UNH undergraduate students interested in ski industry and mountain resort management the opportunity to observe and practice leadership skills and risk management practices in a destination mountain resort setting. Students complete a 45 hour practicum at an approved site within the ski, snowboard, or mountain resort industry. Successful completion of RMP 571 serves as a prerequisite for the RMP professional internship, RMP 764. This course is required for Ski Resort Management Cognate candidates.
Repeat Rule: May be repeated for a maximum of 6 credits. May be repeated up to 2 times.
Grade Mode: Credit/Fail Grading

RMP 593 - Special Topics
Credits: 2-4
A) Camping and Outdoor Education for Individuals with Disabilities, B) State Parks: Their Management and Role, C) Therapeutic Recreation in the School Setting, D) Social Psychology of Leisure, E) New Hampshire's Recreation/Ski Industry, F) Child Life Internship, J) Campus Recreation Applied Leadership, K-Z) Interdisciplinary. Specialized courses covering information not presented in regular course offerings. Description of topics available in department office during preregistration. May be repeated but not in duplicate areas. Special fee for RMP 593G.
Equivalent(s): RMP 593W
Grade Mode: Credit/Fail Grading
Special Fee: Yes

RMP 603 - New Hampshire Ski Industry Management
Credits: 4
This course examines the New Hampshire ski and snowboard industry from several distinct but interrelated perspectives: social, technological, environmental, historical, economic, and operational. Students will explore skiing as a holistic and fulfilling segment of the outdoor recreation field, while gaining an understanding of its interdependence with the state's economy, the natural environment, and New Hampshire's unique cultural history. The influence of New Hampshire's ski industry on the history and growth of the American ski industry will be examined, and the impacts of climate change and other environmental issues will be investigated in light on ongoing societal shifts and relevant technological advancements.
Grade Mode: Letter Grading

RMP 612 - Therapeutic Communication and Facilitation Techniques in Therapeutic Recreation
Credits: 0 or 4
Addresses specific clinical knowledge and skills essential to therapeutic recreation service delivery including clinical interviewing, group process, leisure education, treatment approaches, and intervention techniques.
Prerequisite(s): RMP 502 with a minimum grade of C.
Grade Mode: Letter Grading

RMP 613 - Interventions and Documentation in Therapeutic Recreation
Credits: 0 or 3
This course emphasizes theory and concepts in clinical intervention within therapeutic recreation settings. Students learn to identify and select appropriate facilitation techniques for a variety of client needs. Students also learn to write and interpret practice-based documentation. Students are afforded the opportunity to practice and apply concepts learned.
Co-requisite: RMP 612
Prerequisite(s): RMP 502 with a minimum grade of C.
Grade Mode: Letter Grading

RMP 614 - Assessment and Treatment Planning in Therapeutic Recreation
Credits: 4
Addresses the principles of activity analysis, client assessment, documentation, individualized program planning, selection of interventions, and collaboration with a treatment team.
Attributes: Writing Intensive Course
Prerequisite(s): RMP 502 with a minimum grade of C.
Grade Mode: Letter Grading

RMP 615 - Clinical Lab in Therapeutic Recreation
Credits: 2
A clinical lab that provides students with the opportunity to apply principles central to the effective delivery of therapeutic recreation individualized treatment planning, client assessment, documentation, and activity analysis with members of one of two community sites located in the Seacoast region. Students are required to participate in weekly sessions (five to six hours per week) for a total of 15 weeks.
Co-requisite: RMP 614
Prerequisite(s): RMP 502 with a minimum grade of C.
Grade Mode: Credit/Fail Grading

RMP 641 - Group Facilitation and Leadership
Credits: 4
Course provides students with an introduction to the facilitation and leadership skills necessary to manage a diverse range of client groups and modalities. Students will learn how to prepare and deliver a program or meeting to address client objectives. Specific topics include group process, framing and sequencing, meeting management/facilitation, operating procedures for group initiative challenges, and remote meeting facilitation. Course occurs at the UNH Browne Center.
Grade Mode: Letter Grading

RMP 654 - Professional Development and Ethics
Credits: 3
Focuses on preparing students for the internship experience through the identification of career goals, selection of an approved internship site, and administration of risk audits of selected sites. A portfolio emphasizing process skills in resume construction, interviewing techniques, establishing internship goals and objectives, institutional and personal risks, and self-assessment is developed. Documenting Certification in Basic First Aid and CPR (infant, child, adult) is a component of this course.
Prerequisite(s): RMP 490 with a minimum grade of C.
Grade Mode: Letter Grading

RMP 661 - Organizational Leadership in Recreation Services
Credits: 4
This course explores the principles of organizational leadership and management within parks, recreation, tourism, and related organizations. Students examine organizational behavior, team leadership, and systems thinking to understand how leaders plan, organize, staff, direct, and control resources to achieve mission-driven goals. Through applied learning, students practice key operational skills in supervision, communication, human resource processes, and decision-making while managing teams ethically and effectively. Coursework also develops strategic management competencies, including change management, organizational culture analysis, and adaptive leadership. By the end of the course, students will be equipped to lead people and organizations with integrity, adaptability, and vision in dynamic recreation environments.
Prerequisite(s): RMP 490 with a minimum grade of C.
Equivalent(s): HMGT 635
Grade Mode: Letter Grading

RMP 663 - Financial Management in Recreation Services
Credits: 4
This course provides students with an understanding of the methods, tools, and approaches used by recreation, parks, outdoor, and event planning agencies to manage financial resources effectively. Students will examine diverse funding sources, budgeting and accounting principles, and ethical approaches to procurement, partnerships, and capital improvement. Emphasis is placed on strategic and transparent financial planning that supports sustainable operations and long-term impact in various organizational contexts.
Prerequisite(s): RMP 490 with a minimum grade of C.
Grade Mode: Letter Grading

RMP 668 - Youth Culture and Programs
Credits: 4
Emphasizes the identification of community and personal issues youth face in growing up as well as institutional and programmatic support available to assist youth. The course also examines the leadership, administrative, financial, and marketing tools necessary to develop successful youth programs and services. Service learning fieldwork and the completion of a background check are required.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

RMP 670 - Venue Management Design & Operations
Credits: 4
Provides students with an orientation to the management, design, operation, and functions of various recreation venues. Topics include venue management, operational considerations, support features, and auxiliary functions that impact the manager's role. Students gain insight into key areas of venue management, design, and operations through visits to actual recreation venues.
Grade Mode: Letter Grading
Special Fee: Yes

RMP 680 - Festival and Community Event Planning
Credits: 4
Introduces the planning, marketing, management, and evaluation of festivals and community events. Explores the theories and practices relevant to successful event planning for host community residents and visitors.
Grade Mode: Letter Grading

RMP 693 - Teaching Assistantship
Credits: 2
Students serve as teaching assistants in assigned class activities. Assignments to be made by the class instructor may include teaching and administrative duties.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Credit/Fail Grading

RMP 700H - Senior Honors Project
Credits: 4-6
Under the direction of an RMP faculty member, students complete either a supervised research or applied field study project that builds on their honors coursework. Students submit a written proposal for approval and present the results at the completion of their project. Applied studies address a specific need or problem of a local agency or organization.
Attributes: Honors course
Grade Mode: Letter Grading

RMP 711 - Recreation Resource Management
Credits: 4
Examines the supply and demand of natural resources for outdoor recreation uses, with emphasis on relationships between public and private roles and responsibilities. Social, environmental, and economic impacts of outdoor recreation use are discussed. Current principles and techniques of recreation resource planning and management are outlined.
Grade Mode: Letter Grading

RMP 720 - Adaptive Sport Facilitation for Recreation Therapy and Related Professions
Credits: 4
This course takes a strengths-based approach to examining adaptive sports and recreation for recreational therapists and related professions, with a focus on best practices and risk management in community-based settings. This is an experiential learning course, whereby students will learn how to design, plan, and facilitate a variety of adaptive sports for people with disabilities. Students will learn and apply processes for assessing, selecting, and fitting adaptive sports and recreation equipment for individuals with disabilities.
Grade Mode: Letter Grading

RMP 724 - Research, Evaluation, and Data-Driven Decisions
Credits: 4
This course explores the applications and limitations of research and evaluation within the recreation field, emphasizing the practical application of concepts and tools within recreation, event, and allied health services. Topics include the utility and feasibility of evaluation, evaluation planning and design (including quantitative and qualitative research design, methods, and analysis), evaluation management and data collection, analysis and reporting, and decision-making based on evaluation data.
Attributes: Writing Intensive Course
Prerequisite(s): RMP 490 with a minimum grade of C.
Grade Mode: Letter Grading

RMP 740 - Therapeutic Recreation Service Delivery in Community Settings
Credits: 4
This course provides specialized knowledge and skills related to the practice of Recreational Therapy in a community setting. The course will encourage students to expand their understanding of philosophical constructs, public policy, and professional programs. Specific facilitation techniques and treatment modalities will be introduced as well as information specific to the therapeutic process as it is observed in these settings.
Prerequisite(s): RMP 502 with a minimum grade of C.
Grade Mode: Letter Grading

RMP 764 - Internship
Credits: 8 or 12
Supervised professional work experience in an approved recreation, park, tourism, or healthcare agency. Students participate in a 10 week (400 hour) or 14 week (560 hour) internship experience after receiving approval from their Academic Advisor and the Internship Coordinator.
Prerequisite(s): RMP 654 with a minimum grade of C.
Grade Mode: Credit/Fail Grading

RMP 768 - Theories and Philosophies of Youth Development
Credits: 4
This course provides students with a foundation in the theories and philosophies associated with the field of youth development. Students will analyze the strengths and limitations of various theories, philosophies, and ideas as they are applied in practice and represented in research studies. Examples include: Ecological systems theory, positive youth development, sociocultural perspectives, risk/protective factors, and developmental assets.
Grade Mode: Letter Grading

RMP 772 - Law and Public Policy in Leisure Services
Credits: 4
Topics including the law of torts, contracts, property, civil rights, risk management, and legal research are addressed in the context of leisure services and recreation resources. Public policy and professional advocacy implications are examined in relation to legislative and judicial systems.
Attributes: Writing Intensive Course
Prerequisite(s): RMP 490 with a minimum grade of C.
Grade Mode: Letter Grading

RMP 775 - Entrepreneurial and Commercial Recreation
Credits: 4
Principles of business planning and development as applied to the private sector leisure services industry. Emphasizes knowledge of key commercial leisure services profiles and their intersection with allied professions such as hospitality and tourism. Course topics include entrepreneurship, business planning, needs assessment, product development, selling, financing, legal designations, and business operations leading to the development of a business plan for a new entrepreneurial recreation enterprise.
Grade Mode: Letter Grading

RMP 776 - Human Dimensions of Natural Environments
Credits: 4
This course draws on research and theories that illuminate the profound connections between nature and human health and wellbeing. Students will explore contemporary philosophical, psychological, and cultural perspectives to understand how both organized and unstructured experiences in the outdoors support human flourishing. Students review research and gain hands-on practice with ideas in the context of outdoor recreation, resource management, education, and other human service fields.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

RMP 780 - Event and Experience Design
Credits: 4
This course will explore social and technical aspects of event coordinating, with a focus on the production associated with management, strategic planning and evaluation of event. Throughout the course, students will gain hands-on experience working with volunteers and clients. Students will have the opportunity to plan and execute an event. Students will hone their skills in planning, executing, marketing, risk management and budgeting, while discovering how best practices are applicable to effective event coordinating.
Grade Mode: Letter Grading

RMP 796 - Independent Study
Credits: 1-4
Individual study and/or research relating to leisure-oriented topics.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): LMT 796, RMP 796W
Grade Mode: Letter Grading

RMP 796W - Independent Study
Credits: 1-4
Individual study and/or research relating to leisure-oriented topics.
Attributes: Writing Intensive Course
Equivalent(s): RMP 796
Grade Mode: Letter Grading

Religious Studies (RS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

RS 483 - History of World Religions
Credits: 4
Introduces the religions of the world in terms of historical development, relationship to society, belief system, central texts, and ritual practices. Begins with the religions of small and tribal societies (e.g., African, Native American), moves through religions of complex societies (e.g., Hinduism), and then studies the various traditions that emanated from ancient revelations: Zoroastrianism, Buddhism, Judaism, Christianity, Islam, and certain new forms of Christianity.
Attributes: Historical Perspectives(Disc)
Equivalent(s): HIST 483
Grade Mode: Letter Grading

RS 505 - Introduction to Religion
Credits: 4
This course provides an introduction to religion, exploring the various ways that this phenomenon has been understood, approached, practiced, and studied across human history. The course will examine the different ways that religion can be defined, drawing from a variety of humanities and other disciplines. Foundational theories explaining the origins, persistence, and continued relevance of religion will be compared and applied to different traditions. Topics include concepts of divinity, rituals, myth, mysticism and spirituality, pilgrimage, death and the afterlife, and ultimate reality.
Attributes: Humanities(Disc)
Equivalent(s): HUMA 505
Grade Mode: Letter Grading

Russian (RUSS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

RUSS 401 - Elementary Russian I
Credits: 4
For students without previous training in Russian. An introduction to contemporary standard Russian. Includes a cultural component. Topics include those which enable students to function in Russian in everyday situations (i.e. food, leisure activities, literature, transportation, music, sports, daily life).
Grade Mode: Letter Grading

RUSS 402 - Elementary Russian II
Credits: 4
For students without previous training in Russian. An introduction to contemporary standard Russian. Includes a cultural component. Topics include those which enable students to function in Russian in everyday situations (i.e. food, leisure activities, literature, transportation, music, sports, daily life.) Cannot be taken separately except with permission of instructor.
Attributes: Foreign Language Requirement
Prerequisite(s): RUSS 401 with a minimum grade of D-.
Grade Mode: Letter Grading

RUSS 503 - Intermediate Russian I
Credits: 4
Continued work in grammar, and writing with cultural components. A review of the fundamentals of grammar and syntax. Readings and cultural material included. Topics include: the university, student life, everyday routines, holidays.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Prerequisite(s): RUSS 402 with a minimum grade of D-.
Grade Mode: Letter Grading

RUSS 504 - Intermediate Russian II
Credits: 4
Continued work in grammar, and writing with cultural components. A review of the fundamentals of grammar and syntax. Readings and cultural material included. Topics include: description of people, living arrangements, weather, cities, travel.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Prerequisite(s): RUSS 503 with a minimum grade of D-.
Grade Mode: Letter Grading

RUSS 515 - Introduction to Russia: Contemporary Society and Culture
Credits: 4
Introduction to contemporary Russian society and culture in English. Examines the "Russian mind" (as it was before 1917), the "Soviet mind," and how the two have clashed. Included is also a close examination of how Russians are adapting to the changes that have taken place in their country since the collapse of communism. Material includes readings, films, and realia. Themes to be discussed include leadership; authority and power; the Russian soul; family, women, youth, education, holidays and celebrations; and the new Russians.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

RUSS 521W - Devils, Deities, and Madness in Russian Literature
Credits: 4
Introduces Russian literature from a variety of perspectives. Selected works by famous and lesser known Russian writers on the themes of devils, deities, and madness. Literary texts, as well as film versions of literary texts, are considered in their historical and cultural contexts. Lectures, readings, and discussions in English. Open to all students, including freshmen.
Attributes: Humanities(Disc); Inquiry (Discovery); Writing Intensive Course
Equivalent(s): RUSS 521
Grade Mode: Letter Grading

RUSS 525 - Russia: Mythology and Propaganda
Credits: 4
Exploration of the relationship between mythology and culture as a part of the cultural identity of the Russian people, before the 1917 Revolution, during the Communist period, and since the fall of the Soviet Union. Focus on pre 1917 Slavic pagan, Christian, and folk mythology vis-a-vis Western mythology, on 20C propaganda and control of the "public mind" designed to reshape national identity and on the current deconstruction, reform, and rebirth of the old mythology.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

RUSS 631 - Advanced Russian Conversation and Composition
Credits: 4
Advanced spoken and written Russian designed to include all four language skills (speaking, reading, writing, listening.) Readings on contemporary cultural topics and vocabulary building. Composition and conversation based on Russian-language media and literature.
Attributes: Foreign Language Requirement
Prerequisite(s): RUSS 504 with a minimum grade of D-.
Grade Mode: Letter Grading

RUSS 632 - Advanced Russian Conversation and Composition
Credits: 4
Advanced spoken and written Russian designed to include all four language skills (speaking, reading, writing, listening.) Readings on contemporary cultural topics and vocabulary building. Composition and conversation based on Russian-language media and literature.
Attributes: Writing Intensive Course; Foreign Language Requirement
Prerequisite(s): RUSS 504 with a minimum grade of D-.
Grade Mode: Letter Grading

RUSS 691W - Readings in Russian Literature
Credits: 1-4
Linguistic and stylistic characteristics of one of the major works in Russian literature. Study of the epoch when the work was written, as well as reading the literary work and discussing it. Students learn to analyze a literary work in the target language. Readings, class discussions, and papers conducted entirely in Russian.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

RUSS 733 - History of Slavic Languages and Culture
Credits: 4
Students look at modern Russian (standard and dialects) through the perspective of the history of the language. Focuses on the evolution of phonetics and grammar as well as etymology. Russian's relation to other Slavic languages is discussed. Students look at the language through the lens of history, culture, and politics.
Equivalent(s): RUSS 790
Grade Mode: Letter Grading

RUSS 795 - Independent Study
Credits: 1-4
Open to highly qualified juniors and seniors. To be elected only with permission of the Russian program coordinator and the supervising faculty member or members. Barring duplication of subject, may be repeated for credit.
Repeat Rule: May be repeated up to 4 times.
Grade Mode: Letter Grading

RUSS 797 - Special Studies in Russian Language, Literature, and Culture
Credits: 2 or 4
Selected topics in language, literature, and culture. Barring duplication of subject, may be repeated for credit.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

Science (SCI) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SCI 412 - Introduction to Astronomy
Credits: 4
Through a variety of activities, this course provides the student with a basic background in astronomy which enhances appreciation of the universe and the technology used in our attempt to understand it. This course exposes the student to the real, measurable, and verifiable connections that exist between the universe and life on Earth. Readings, observations, discussions, and other activities will explicate that what goes on out there can and does have a real and measurable influence on what happens down here.
Attributes: Physical Science(Discovery); Phys Natural World (Gen Ed)
Equivalent(s): SCI 512G
Grade Mode: Letter Grading

SCI 470 - Physical Geography
Credits: 4
Physical Geography is the study of planet Earth. In this course, students examine the nature of the Earth's six spheres: the atmosphere (the layer of gases); hydrosphere (the water in oceans, streams, lakes, etc.); cryosphere (the ice in glaciers); geosphere (the solid earth), biosphere (life); and anthrosphere (humans and human activities). By investigating the processes operating within each sphere and how these spheres interact with each other to shape all aspects of our planet, students gain an understanding of how the Earth works and how landscape features have formed.
Attributes: Physical Science(Discovery); Phys Natural World (Gen Ed)
Equivalent(s): SCI 518G
Grade Mode: Letter Grading

SCI 480 - Introduction to Oceanography
Credits: 4
This course examines the ocean, including the processes that control its major features, the life within it, and its impact on earth processes. An ecological approach is used to integrate the geological, biological, chemical, and physical aspects of oceanography. Special emphasis is placed on the coastal environment.
Attributes: Physical Science(Discovery); Phys Natural World (Gen Ed)
Equivalent(s): SCI 520G
Mutual Exclusion: No credit for students who have taken ESCI 501.
Grade Mode: Letter Grading

SCI 490 - Human Biology
Credits: 4
This course is an introductory study of anatomy and physiology that provides a foundation in biological science and the structure and function of the human body. Topics explored include cellular biology and molecular composition, tissues, organs, and how the human body systems perform and adapt. The building of a relevant vocabulary and a foundation of facts and concepts provides the background needed for further understanding of developments in bioscience and biomedicine.
Attributes: Biological Science(Discovery); Phys Natural World (Gen Ed)
Equivalent(s): SCI 505G
Grade Mode: Letter Grading

SCI 502 - Nutrition and Health
Credits: 4
This course provides the student with a foundation in the science of human nutrition and metabolism. The research supporting direct and indirect links between nutrition and disease is introduced. Topics covered may include the biological functions and food sources of each nutrient; nutrition guidelines and standards; digestion and absorption of nutrients; nutrition throughout the lifecycle; food safety and technology; energy balance and weight management; eating disorders and disturbances; and physical activity.
Attributes: Biological Science(Discovery); Phys Natural World (Gen Ed)
Equivalent(s): SCI 502G
Grade Mode: Letter Grading

SCI 508 - Issues in Women's Health
Credits: 4
This course examines women's health and women's health care from biological, medical, historical, political, and social perspectives. It begins with the study of endocrinology and the physiological processes unique to women. Factors related to health care issues specific to women are examined. Societal and health care constraints, which hinder women from achieving their full health potential are also addressed. The course also presents information on women's health care practices, including the concept of self-care, and relates this to the development of educated consumerism in the health care industry.
Attributes: Biological Science(Discovery); Phys Natural World (Gen Ed)
Equivalent(s): SCI 508G
Grade Mode: Letter Grading

SCI 528 - Natural History of Northern New England
Credits: 4
This course focuses on the evolutionary adaptations of plants and animals that allow them to survive and thrive through all of New England's seasons. Students are introduced to the origin and development of the diverse ecosystems of our region and their relationship to the resident and migratory wildlife of Northern New England. The effects of the Ice Age on northern New England's topography and on the rhythms of the animal and plant life cycles are investigated.
Attributes: Phys Natural World (Gen Ed)
Equivalent(s): SCI 528G
Grade Mode: Letter Grading

SCI 541 - Introduction to Environmental Science
Credits: 4
An introductory survey of global environmental problems such as global warming, acid rain, nuclear waste storage, agricultural runoff, and heavy metal contamination. This course explores the interrelationship between the natural environment and the effects of human activity resulting in pollution of air, water, and land. A major focus of the course is critical examination of ecological, economic, and political aspects of pollution in a global context.
Attributes: Physical Science(Discovery); Phys Natural World (Gen Ed); Writing Intensive Course
Equivalent(s): SCI 541G
Grade Mode: Letter Grading

SCI 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in Science. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): SCI 544G
Grade Mode: Letter Grading

SCI 550 - Wellness and the Human Body
Credits: 4
This course examines the integration of the human body systems. Common pathologies that interfere with normal physiological function and quality of life are examined and evidence-based practices for disease prevention and wellness are addressed. Recommended: SCI 490.
Attributes: Biological Science(Discovery); Phys Natural World (Gen Ed)
Equivalent(s): SCI 603G
Grade Mode: Letter Grading

SCI 575 - Introduction to Lifestyle Medicine
Credits: 4
This course introduces students to the domain of lifestyle medicine, where they will discover how everyday choices can transform well-being and health outcomes. Emphasizing evidence-based strategies, students explore the six essential pillars of lifestyle medicine – nutrition, physical activity, sleep, stress management, social connections, and avoidance of risky substance use – and develop skills to apply these concepts in personal and professional contexts.
Attributes: Biological Science(Discovery); Phys Natural World (Gen Ed)
Grade Mode: Letter Grading

SCI 604 - Principles of Exercise Science
Credits: 4
This is an applied course addressing exercise physiology and integrated kinesiology principles. Students will examine how the mind and body respond to various intensities and modalities of exercise as well as explore various methods of measuring physiological variables such as cardiovascular fitness, muscular strength and endurance, flexibility, and body composition. Topics include: energy systems, neuromuscular concepts, and functions of the cardiovascular and respiratory systems during rest and exercise. Students enrolled in this course are required to complete the college's risk waiver prior to participating in any physical activity.
Attributes: Biological Science(Discovery); Phys Natural World (Gen Ed)
Prerequisite(s): SCI 490 with a minimum grade of D- or SCI 505G with a minimum grade of D-.
Equivalent(s): SCI 604G
Grade Mode: Letter Grading

SCI 610 - Contemporary Issues in Personal and Global Health
Credits: 4
This course explores current issues in health from a scientific lens. Students will examine diverse factors that influence the wellness-illness continuum related to a specific topic. Perspectives include the biological, sociocultural, behavioral, and public health implications, to these personal and global health challenges.
Attributes: Environment,TechSociety(Disc); Phys Natural World (Gen Ed); Writing Intensive Course
Equivalent(s): SCI 610G
Grade Mode: Letter Grading

SCI 615 - Fitness and Health
Credits: 4
This course presents the concepts of physical activity and exercise that connect to our health and well-being. Students will study how exercise is a mechanism to improve fitness, control weight, cope with life stressors, and optimize mindset. Students will have the opportunity to explore how the body and mind respond to different types of physical activity and the resulting health improvements of physical activity recommendations. Health behaviors and tools that support physical activity as part of a holistic approach to wellness will be addressed.
Attributes: Phys Natural World (Gen Ed)
Equivalent(s): SCI 615G
Grade Mode: Letter Grading

SCI 644 - Special Topics: Upper Level
Credits: 1-4
A study of current and variable topics in Science. Course content changes from term to term. It is expected that the student will have prior course work or experience in the subject area.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): SCI 644G
Grade Mode: Letter Grading

Sign Language Interpreting (INTR)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

INTR 430 - Introduction to Interpretation
Credits: 4
A survey of traditional and contemporary perspectives on interpretation and interpreters; introduces the cognitive processes involved in interpretation and factors that influence those processes. Several models of interpretation explored. Particular attention given to interpretation as an intercultural, as well as inter-lingual, process. Students engage in a research project related to course content.
Grade Mode: Letter Grading

INTR 438 - A Socio-cultural Perspective on the Deaf Community
Credits: 4
Introduction to the deaf community and deaf culture. Discussion of similarities to, and differences from, mainstream hearing culture. Supplemental videotapes focus on aspects of culture including deaf education, autobiographical sketches, deaf norms and values, and deaf literature and folklore. Theoretical issues of culture and linguistics applied to deaf culture, American Sign Language, and the variety of cultural perspectives of the deaf community. Students engage in a research project related to course content.
Attributes: Social Science (Discovery); Writing Intensive Course
Prerequisite(s): ENGL 401 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

INTR 439 - Ethics and Professional Standards for Interpreters
Credits: 4
Seminar course using readings, theory, and discussion of hypothetical situations and role plays to explore ethical standards and dilemmas in ASL-English interpretation. Covers personal and professional values, ethics, and morality; professional principles; power, responsibility, and group dynamics; the interpreter's role; cross-cultural issues; and the decision-making process. Students engage in a research project related to course content.
Attributes: Writing Intensive Course
Prerequisite(s): INTR 430 with a minimum grade of D-.
Grade Mode: Letter Grading

INTR 539 - Comparative Linguistic Analysis for Interpreters
Credits: 4
Examines the basic similarities and differences between the linguistic structure of American Sign Language and spoken English; focuses on each language's communication functions and how they serve these functions. Students engage in a research project related to course content.
Prerequisite(s): ASL 532 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

INTR 540 - Translation
Credits: 0 or 4
Introduction to theory and practice of translation. Students analyze pre-prepared interpretations and translations to discover how expert interpreters and translators construct meaning in the alternate language. Particular attention paid to the form/meaning distinction. Students prepare translations from texts of their choosing. Lab.
Prerequisite(s): ASL 532 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

INTR 599 - Special Topics
Credits: 1-4
Occasional offerings dependent on availability and interest of faculty. Barring duplication of subject, may be repeated.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

INTR 630 - Consecutive Interpretation I
Credits: 0 or 4
Introduction to the theory and practice of consecutive interpretation. Analyzes and integrates specific subtasks of the interpreting process culminating in the performance of prepared and spontaneous consecutive interpretations. Students work with a variety of texts, language models, and settings with the goal of engaging in the consecutive interpreting process by chunking information and constructing meaning in the alternate language. Lab.
Prerequisite(s): INTR 540 with a minimum grade of D-.
Grade Mode: Letter Grading

INTR 636 - Consecutive Interpretation II
Credits: 0 or 4
Continues and advances the theory and practice of consecutive interpretation and introduces simultaneous interpretation. The focus of this course is on interactive discourse (dialogues). Particular attention is given to processes involved in the transition from consecutive to simultaneous interpreting, and determining when to use each mode of interpretation. The advantages and limitations of both types of interpreting are compared. Students apply theoretical information to the process of simultaneous interpreting. Students also engage in a research project related to course content. Lab.
Prerequisite(s): INTR 630 with a minimum grade of D-.
Grade Mode: Letter Grading

INTR 732 - Simultaneous Interpretation
Credits: 0 or 4
Focuses on simultaneous interpretation of expository discourse (presentations). Students further explore and apply theory learned in INTR 636 to a variety of texts, language models, and settings. Students engage in a research project related to course content. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): INTR 636 with a minimum grade of D-.
Grade Mode: Letter Grading

INTR 734 - Field Experience and Seminar I
Credits: 4
Gives students the opportunity to observe professional working interpreters, with some direct interpreting experience as deemed appropriate. Students integrate knowledge, theoretical understanding, and skills acquired in the interpreting program by working closely with on-site supervisors (interpreters) in addition to attending a bi-weekly seminar with the UNHM field experience coordinator.
Prerequisite(s): INTR 732 (may be taken concurrently) with a minimum grade of D-.
Grade Mode: Letter Grading

INTR 735 - Field Experience and Seminar II
Credits: 4
Gives students the opportunity to gain supervised interpreting experience. Students engage in actual interpreting assignments and receive support and mentorship from a professional interpreter, enabling them to integrate knowledge, theoretical understanding, and skills acquired in the interpreting program. Students work closely with on-site supervisors (interpreters) in addition to attending a biweekly seminar with the UNHM field coordinator.
Prerequisite(s): INTR 734 with a minimum grade of D-.
Grade Mode: Letter Grading

Social Science (SOSC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SOSC 445 - Race & Diversity in the U.S.
Credits: 4
This course offers an introduction to the body of research and understanding about race and diverse identities and cultures, particularly in the context of the United States. Students will identify and describe terminology relating to race and diversity and will explore and describe the concepts of race, culture, class, sex, and gender identity as social constructs. Students will be asked to think critically about assumptions related to race- and sex-based hierarchical ideas and the effects of those assumptions on equitable economic, social, and political participation in the United States. Students will explore, and explain, the meaning of intersectionality as it relates to diverse identities (e.g. race, ethnicity, sex and gender, etc.).
Attributes: HumanBehavSocial Sys (Gen Ed)
Equivalent(s): SOSC 505G
Grade Mode: Letter Grading

SOSC 544 - Special Topics: Lower Level
Credits: 1-4
A study of current and variable topics in Social Science. Course content changes from term to term.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): SOSC 544G
Grade Mode: Letter Grading

SOSC 602 - Men and Women in Cross-Cultural Perspectives
Credits: 4
This course provides a basis for analyzing alternatives in the relationships between men and women by looking at the roles women play in widely different societies; for example, in peasant, socialist, and capitalist industrial societies. The range of women's and men's roles in a variety of cultures is explored.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D-.
Equivalent(s): SOSC 602G
Grade Mode: Letter Grading

SOSC 610 - Multicultural Perspectives in Education
Credits: 4
In this course, students will demonstrate an understanding of the major principles, theories, and research pertaining to the influence of cultural groups and subgroups on language learning, school achievement, and acculturation. Students will explore the role of cultural and social identities and demonstrate the ability to apply this knowledge in identifying environments that support both students' identities and academic needs. The role of the dominant culture and its impact on students will be explored.
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D-.
Equivalent(s): EDU 631G
Grade Mode: Letter Grading

SOSC 630 - Aspects of Aging and Older Adulthood in a Modern Society
Credits: 4
The course introduces the physical, psychological, economic, and social aspects of aging. Attention is given to these key aspects of aging and their relationship to the characteristics of our aging population in the United States. The course also explores the impact of culture, family structure, and societal values on older adults in our society.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D-.
Equivalent(s): SOSC 630G
Grade Mode: Letter Grading

SOSC 644 - Special Topics: Upper Level
Credits: 1-4
A study of current and variable topics in Social Science. Course content changes from term to term. It is expected that the learner will have prior coursework or experience in the subject area.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): SOSC 644G
Grade Mode: Letter Grading

SOSC 675 - Dynamics of Family Relationships
Credits: 4
This course examines evolving family structures in contemporary American society. The functions that a family serves are reviewed. The stages of family life and development, a variety of communication patterns, and the causes of breakups are addressed. The focus of the course is on helping students develop an ability to assess the strengths of a family system, evaluate the decision-making processes used by a family, and discuss the resiliency of the family. The course reviews a range of intervention methods that can be used to improve family relationships.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D- or CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D-.
Equivalent(s): SOSC 604G
Grade Mode: Letter Grading

SOSC 680 - Stress and the Family
Credits: 4
This course examines the characteristics of both healthy and troubled families as they progress through each developmental stage. Change is a constant in each person's life; the family's response to change and the resulting stress is reviewed. A family's ability to manage extraordinary stressors, from both external and internal sources, is discussed. There is an emphasis on maladaptive patterns including family violence, runaways, and self-harming patterns. NOTE: Completion of SOSC 675 is recommended.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D- or CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D-.
Equivalent(s): SOSC 605G
Grade Mode: Letter Grading

SOSC 710 - Social Stratification and Inequality
Credits: 4
This course explores the diversity of life experiences in contemporary America and assesses structured inequality in terms of socioeconomic, racial, gender, and sexuality differences. Using the theoretical framework of the social construction of race, gender, economic class, sexual orientation, and disability in historical contexts, the course examines how and why stratification systems emerge and are reproduced. Students then consider alternatives to the categories of difference and the processes, philosophical developments, institutions, and conditions that lead to and rely on power and privilege in modern society.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D- or CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D-.
Equivalent(s): SOSC 637G
Grade Mode: Letter Grading

Social Work (SW)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SW 424 - Introduction to Social Work
Credits: 4
Introduces the learner to the field of social work with emphasis on the "person-in-environment" and attention to a range of practice approaches to understanding and assisting of the human condition. An overview of the history, values, and ethics of the profession. Includes various fields of practice in which social workers are employed.
Equivalent(s): SW 524
Grade Mode: Letter Grading

SW 440A - Honors/Healthy Communities: Environmental Justice and Social Change
Credits: 4
This course provides students with opportunities to examine and promote health within communities. Students explore components of healthy communities, with a focus on equity, sustainability, and social and environmental justice. The class examines historical, contemporary, and future factors that empower and constrain community residents and systems. Students practice skills for social change and engage in experiential activities and discussion designed to foster consideration of community health and social justice.
Attributes: Honors course; Social Science (Discovery)
Grade Mode: Letter Grading

SW 500 - I'm Old, So What! An introduction to aging in the United States
Credits: 4
This is the first of two mandatory courses for the GERO Minor, but any student may take it as an elective. It introduces the learner to the field of gerontology (the study of how people age). It explores the biological, psychosocial, and cognitive changes within the context of society. The history of ageism and its influence on how it has affected the individual, families, and society is presented. The range of independence among older people is examined. Various disciplines that work within the field of gerontology are reviewed. Lectures, novels, films and guest speakers help to examine growing old in the U.S.
Equivalent(s): GERO 500
Grade Mode: Letter Grading

SW 501 - Research Methods in Social Work
Credits: 4
This course introduces students to practitioner-researcher role in social work. The class includes critical evaluation of, and introduction to research including project design, survey and evaluative methodologies. The course introduces students to statistics used in research process. Each student completes an individual research project.
Attributes: Social Science (Discovery); Inquiry (Discovery); Writing Intensive Course
Prerequisite(s): SW 424 with a minimum grade of D-.
Equivalent(s): SW 601
Grade Mode: Letter Grading

SW 525 - Social Welfare Policy: History of Social and Economic Justice
Credits: 4
Course considers the history and current status of social welfare policy in the United States, with specific considerations of policies related to immigration, social benefits, housing, labor, health, criminal justice, education, and child welfare. Students build skills related to: the critical consumption of information across perspectives, authors, and historical contexts; the integration of personal experiences in understanding the impact of social welfare policy; and the analysis of historical and current policies with a focus on their impacts on inclusivity, diversity, equity, anti-racism, and anti-oppression.
Attributes: Historical Perspectives(Disc)
Grade Mode: Letter Grading

SW 550 - Human Behavior and Social Environment I
Credits: 4
Introduces human behavior and development as it influences and is influenced by multiple factors in the social environment, including individual genetic and biological composition, race, gender, age, socioeconomic status, ethnicity, geographic location, physical appearance, and ability. How these factors operate throughout the life cycle. Provides a knowledge base and perspective to understand a client's behavior, attitude, and values in relation to the attitudes and values of the social work professional and the larger society.
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

SW 551 - Human Behavior and Social Environment II
Credits: 4
Agents of socialization that most significantly affect family, group, and organizational development and behavior within an ecosystems framework. Particular attention is paid to the influence of class, gender, race, ethnicity, religion, age, sexual orientation and other aspects of diversity on development and behavior of larger systems.
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

SW 565 - Introduction to Child Life
Credits: 4
When facing acute, chronic, or life-threatening illness and traumatic injuries, children and families have unique needs within the medical system. The purpose of this course is to provide an introduction to the theory and practice of the child life profession and family centered care. Topics include children's emotional reactions to hospitalization, use of play, preparation, and family support, designing healing environments, and specializations within the field.
Equivalent(s): HDFS 565
Grade Mode: Letter Grading

SW 611 - Behavioral Health and Well Being
Credits: 4
This course provides an overview of behavioral health and wellbeing through a social justice lens. While students will learn about the traditional approach to behavioral health including the diagnosis and assessment of "mental illness", they will also explore contemporary perspectives that view our behavioral health as inseparable from our bodies, families, communities, and other social determinants of health.
Equivalent(s): SW 711
Grade Mode: Letter Grading

SW 622 - Social Work Practice: Interventions with Individuals and Families
Credits: 4
Introduces students to the basic values, theories, and skills of social work practice. This is accomplished using lectures, discussions, readings, written exercises, and using laboratory and practice sessions. The intent is for students to use the experiential parts of the course (group work and interview simulations) to apply the conceptual and theoretical knowledge gained from lectures, class discussions and readings.
Prerequisite(s): SW 424 with a minimum grade of C.
Grade Mode: Letter Grading
Special Fee: Yes

SW 623 - Social Work Practice: Interventions with Groups, Organizations and Communities
Credits: 4
Continuation of SW 622. Delineation and study of intervention and change strategies differentiated with individuals, groups, and communities.
Attributes: Writing Intensive Course
Prerequisite(s): SW 622 with a minimum grade of C and SW 424 with a minimum grade of C.
Grade Mode: Letter Grading

SW 625 - Social Welfare Policy: Analysis, Activism, and Advocacy
Credits: 4
Course examines the role of and sources of power in policy development and policy implementation. Students develop skills related to: the critical analysis of power and privilege in the policy process; the continuous processes of self-reflection that are essential for social workers working in communities experiencing oppression; and the implementation of activism and advocacy efforts in the abolition of systems of oppression and the pursuit of social justice.
Attributes: Writing Intensive Course
Prerequisite(s): SW 424 with a minimum grade of C and SW 525 with a minimum grade of C.
Grade Mode: Letter Grading
Special Fee: Yes

SW 630 - Anti Oppressive Practice in Social Work
Credits: 4
The nature and impact of oppression will be defined and understood through historical, structural, intergroup, and psychological perspectives to support the development of human service majors. The social construction of individual and group identities and their relationship to oppression, prejudice, discrimination and powerlessness in social and interpersonal contexts will be explored and their impact on individuals, families, groups, organizations and communities. Students will have an opportunity to examine their own experiences of both privilege and oppression. Implications for practice that is strengths oriented and culturally sensitive will be explored. The unique challenges and dilemmas that historically marginalized groups experience will be examined. Students will learn to critically examine theories, concepts, and models of practice for all forms of bias. The course will combine lecture, discussion, and experiential learning as students have an opportunity to learn and apply skills of anti-oppressive practice.
Prerequisite(s): SW 525 with a minimum grade of D-.
Grade Mode: Letter Grading

SW 660 - Exploring Issues in Housing and Homelessness
Credits: 4
This course examines the meaning we attach to shelter in our society, and will examine multiple perspectives on the issues of housing and homelessness. The course will begin with a macro perspective and will draw on economic, humanistic, and historical perspectives to respond to this question, is housing a right? Students will also examine community development approaches to housing and their neighborhood effects. The course will conclude with an in-depth look at the complexities of homelessness.
Grade Mode: Letter Grading

SW 697 - Special Topics in Social Welfare
Credits: 4
Seminar for advanced majors. Topics may include: Alcohol and Alcoholism, Drugs and Chemical Dependency, Income Maintenance, Health Care, Child Welfare, Aging, Mental Health, or Developmental Disabilities. or study travel experiences. May be repeated for different topics.
Repeat Rule: May be repeated up to 1 time.
Grade Mode: Letter Grading
Special Fee: Yes

SW 702 - Aging and Society
Credits: 4
This course is designed to formalize students with biological, psychological, and sociological perspectives of aging and social services and policies for older people. This course covers a broad range of theories and contemporary issues in the field of aging. It also focuses on the strengths and limitations of existing programs and policies such as Social Security, Medicare, Medicaid, Supplemental Security Income, and other community services. Comparisons to developments in other countries will be made throughout the course to provide a broader context for understanding aging and programs/policies in the U.S.
Grade Mode: Letter Grading

SW 704 - Adolescents with Emotional and Behavioral Challenges
Credits: 4
This course focuses on the characteristics and needs of youth with emotional and behavioral challenges based upon socio-cultural and ecological theories, and provides exposure to family- and youth-driven practices and approaches that represent System of Care values and principles.
Grade Mode: Letter Grading

SW 705 - Child and Adolescent Risks and Resiliency: Program, Policy and Practice
Credits: 4
In this course, students apply an anti-oppressive lens in exploring the major social work practices, policies, and programs in the fields of child welfare and child/family services. Students will be introduced to current research related to the impact of trauma across the lifespan, with an emphasis on risk/resiliency factors within the family system. Students will learn how past/current child welfare policy and practice perpetuates social injustice, oppression, and trauma. Alternative approaches to support children and caregivers within the family, home, and community will be emphasized.
Grade Mode: Letter Grading

SW 707 - Child Maltreatment
Credits: 4
This course introduces students to advanced concepts in child welfare with an emphasis on child maltreatment assessment and child protective services. The course addresses emerging assessment practices, data informed child protective service provision, the role of technology in child welfare practice, and workforce development.
Grade Mode: Letter Grading

SW 710 - SW and the Digital Age
Credits: 4
This course focuses on the ever-changing landscape of technology as it relates to the Social Work field. Students will explore topics such as telehealth, online communities, assistive technology as well as digital advocacy. Ethical implications of the integration of technology into Social Work will be explored throughout the course. Students will work independently or collaboratively at a distance to create a multi-media project focused on a topic of interest within Digital Social Work.
Grade Mode: Letter Grading

SW 712 - Understanding Developmental Disabilities
Credits: 4
Analysis of the complex social contexts of people with developmental disabilities. Explores and questions traditional approaches and the current system. Examines family and community services and resources.
Grade Mode: Letter Grading

SW 713 - School Social Work
Credits: 4
The course examines the school as a social institution that serves to educate and socialize children into US society and the role of the social worker in the school setting. Readings, activities, and discussions provide practical skills and theory for school social work practice. The course content addresses the history of school social work integrating social work values into a school setting, systemic needs within school settings, the importance of networking and professional collaboration, and working with diverse and at-risk youth and their families. Students also examine the role of school social workers in helping students, schools and families adjust to and cope with trauma, special education needs, and related topics.
Grade Mode: Letter Grading

SW 715 - Affirming Practice with Lesbian, Gay, Bisexual, Transgender, Queer+ People
Credits: 4
This course addresses the task of clinical practice with lesbian, gay, bisexual, transgender, queer, questioning, asexual, intersex, two-spirit, genderqueer, pansexual, and beyond (LGBTQ+) people on both personal and professional levels for the social worker. The class makes use of personal narratives, as well as theoretical and clinical practice readings. Students are expected to explore and examine their own attitudes, beliefs, and assumptions about LGBTQ+ people.
Grade Mode: Letter Grading

SW 721 - International Social Work
Credits: 4
This course introduces the growing field of international social work. It addresses the impact of globalization on social work practice, provides an overview of the social work profession around the world, and considers current challenges and suggested ways social workers can contribute to solutions. Human rights and globalization are dominant themes underlying international social work and serve as unifying concepts for examining various global issues. The focus of the course is on global social issues with particular attention to human rights, development, racism, status of women and children, climate change, immigrants and refugees, HIV/AIDS, and aging populations. Linkages between international and domestic social work practice are emphasized, making the course relevant to all students and their future practice.
Grade Mode: Letter Grading

SW 740 - Social Work Internship Experience
Credits: 4
Majors are placed in a social welfare setting for a minimum of 225 hours; individual arrangements with faculty coordinate. (No credit toward a minor).
Co-requisite: SW 740A
Prerequisite(s): SW 622 with a minimum grade of C.
Equivalent(s): SW 640
Grade Mode: Credit/Fail Grading
Special Fee: Yes

SW 740A - Social Work Internship Experience I: Seminar
Credits: 4
This weekly seminar, held concurrently with SW 740 Social Work Internship Experience I, integrates the internship experience with Social Work theory and concepts learned throughout the curriculum through class discussion, exercises, readings, and written assignments. Seminar I is an opportunity for orientation to internship, continued development of your social work professional identity, review and application of the NASW Code of Ethics, integration of Anti-Oppressive (AOP) social work practices, and the use of small group discussion for problem solving. Students learn to use supervision effectively, to participate in the helping process, and to manage their own stress. Students assess the impact of policy on the client system, agency, and worker and to use research to inform practice.
Co-requisite: SW 740
Prerequisite(s): SW 622 with a minimum grade of C.
Equivalent(s): SW 640A
Grade Mode: Letter Grading

SW 741 - Social Work Internship Experience II
Credits: 4
A continuation of SW 740 with a minimum of 225 hours required in this term.
Co-requisite: SW 741A
Prerequisite(s): SW 740 with a minimum grade of C and SW 740A with a minimum grade of C.
Equivalent(s): SW 641
Grade Mode: Credit/Fail Grading

SW 741A - Social Work Internship Experience II: Seminar
Credits: 4
This is a continuation of Social Welfare Internship Experience I: SW 740A and builds upon the concepts presented in the student's first internship practice seminar. This seminar meets weekly for two and a half hours and is held concurrently with the internship placement. It is designed to integrate the internship experience with social work concepts through class discussion, reading and written assignments. Topics include but are not limited to, understanding and using agency structure to enhance client interactions, preparing client assessment and other documents, enhancing the client-worker therapeutic interaction, effective use of supervision, effective use of self in practice, prevention of burn-out, termination with clients and with agency staff, and values and ethics.
Co-requisite: SW 741
Prerequisite(s): SW 740 with a minimum grade of C and SW 740A with a minimum grade of C.
Equivalent(s): SW 641A
Grade Mode: Letter Grading

SW 770 - Intimate Partner Violence
Credits: 4
This course examines intimate partner violence or domestic violence from its historic roots to the present. In accordance with an historical and contextual approach, the course examines theories that explain and describe the phenomenon, research that attempts to define it, as well as social policies, social movements, and intervention from a social work perspective. Intimate partner violence, cuts across ethnics, racial, and class boundaries and impedes a victim's wellbeing and social participation.
Grade Mode: Letter Grading

SW 785 - Study Abroad: Comparative Social Welfare Systems
Credits: 4
Students examine the historical development of social welfare in another country including an analysis of the underlying values and attitudes that dictate practice and policy decisions. Includes agency site visits, lectures, themed readings, and visits to important cultural sites.
Co-requisite: INCO 687
Grade Mode: Letter Grading
Special Fee: Yes

SW 795 - Independent Study in Social Service
Credits: 1-6
Independent work under department faculty guidance. Enrollment by permission only through arrangement with specific faculty. May be repeated with a different focus. 12 hours in social work coursework required.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading
Special Fee: Yes

SW 796 - Independent Study: Teaching Assistantship
Credits: 1-6
Participating students provide leadership and supervision for small groups of social work majors in social work practice simulations. Student teaching assistants work closely with, and under the direction of, department faculty.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

SW 797 - Special Topics in Social Welfare
Credits: 4
Seminar for advanced majors cross-listed with SW 897. Topics may include: alcohol and alcoholism, drugs and chemical dependency, income maintenance, health care, child welfare, aging, mental health, or developmental disabilities or study travel experiences. May be repeated for different topics.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading
Special Fee: Yes

SW 798 - Undergraduate Thesis in Social Work
Credits: 1-6
Collaborating with a faculty adviser, students propose, develop, and implement a thesis research project for both oral and written presentation. The thesis must be a significant research project through which the student independently demonstrates their expertise in a specific topic area.
Prerequisite(s): SW 601 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 6 credits.
Equivalent(s): SW 798H
Grade Mode: Letter Grading

SW 798H - Honors Thesis
Credits: 2-4
Working with an assigned faculty adviser, students propose and develop a thesis project for both oral and written presentation before the end of the semester. 16 hours in social work coursework required. This course requires registration over multiple terms prior to earning final grade.
Attributes: Honors course
Repeat Rule: May be repeated for a maximum of 6 credits.
Grade Mode: Letter Grading

SW 799 - Senior Project
Credits: 1-6
Working with an assigned faculty adviser, students propose and develop a community project for both oral and written presentation during the senior year.
Prerequisite(s): SW 601 with a minimum grade of C.
Repeat Rule: May be repeated for a maximum of 6 credits. May be repeated up to 3 times.
Mutual Exclusion: No credit for students who have taken SW 799H.
Grade Mode: Letter Grading

SW 799H - Honors Project
Credits: 1-6
Working with an assigned faculty adviser, students propose and develop a community project for both oral and written presentation during the senior year. Admission to the SW Honors Program required. This course requires registration over multiple terms prior to earning final grade.
Attributes: Honors course
Prerequisite(s): SW 601 with a minimum grade of C.
Repeat Rule: May be repeated for a maximum of 6 credits. May be repeated up to 3 times.
Mutual Exclusion: No credit for students who have taken SW 799.
Grade Mode: Letter Grading

Sociology (SOC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SOC 400 - Introductory Sociology
Credits: 4
Overview of sociology as the scientific study of human social and cultural relationships. Social theory, methods and techniques of research, and current research findings on a wide range of social issues.
Attributes: Social Science (Discovery)
Equivalent(s): SOC 400H, SOC 400W
Grade Mode: Letter Grading

SOC 402 - Statistics
Credits: 4
Elementary applied statistical techniques; tables, graphs, cross-clarifications; central tendency and dispersion; correlation and linear regression; confidence intervals and hypothesis testing. Other statistical classes including ADM 430, BIOL 528, ADMN 420, EREC 525, HHS #540, MATH 439, MATH 539, PHIL 412, MATH 644, PSYC 402 cannot be used to satisfy the major requirement. This is, all majors must take SOC 402 even if they have taken an introductory statistics course in another department. A student can, however, petition to receive eight credits for two introductory statistics courses, if and only if, SOC 402 is taken after the student became a sociology major and took their first statistics course prior to declaring SOC as their major. Majors cannot receive credit for statistics courses taken after they have declared SOC.
Attributes: Quantitative Reasoning(Disc)
Equivalent(s): SOC 402H, SOC 502, SOC 502H
Mutual Exclusion: No credit for students who have taken ADM 430, ADMN 420, ADMN 510, BIOL 528, EREC 525, HHS 540, HMP 540, MATH 439, MATH 539, MATH 644, MTH 504, MTH 701, PSYC 402, PSYC 402H.
Grade Mode: Letter Grading

SOC 444A - Honors/Society in the Arctic
Credits: 4
Introduction to societies of the far North today, from Alaska and Canada through Greenland, Iceland, northern Scandinavia and Russia. Reviews interconnected issues of social change, environment, sustainable development, local control, and modernization vs. traditions. Arctic dilemmas highlight some basic questions facing all societies in the 21st century.
Attributes: Environment,TechSociety(Disc); Honors course; Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

SOC 450 - Contemporary Social Problems
Credits: 4
This course introduces students to the study of major social problems in contemporary society, including poverty, discrimination, inequality, crime, violence, and environmental degradation. Explores how and why people come to view certain social conditions as problematic. Also explores the consequences of and possible solutions to contemporary social problems.
Attributes: Social Science (Discovery)
Equivalent(s): SOC 540
Grade Mode: Letter Grading

SOC 515 - Introductory Criminology
Credits: 4
Introduces the scientific study of crime. Reviews the different forms of criminal behavior, theories of crime, and strategies of crime control.
Grade Mode: Letter Grading

SOC 520 - Family
Credits: 4
Sociological study of marriage and the family in American society. Following a life-cycle approach, topics include gender roles, communication and conflict, dating and mate selection, work and family economics, the transition to parenthood, middle- and late-life family, divorce, and remarriage.
Equivalent(s): SOC 520H
Grade Mode: Letter Grading

SOC 525 - Juvenile Crime and Delinquency
Credits: 4
Crime, violence, and the criminal justice system as it affects children and youth in the role of both perpetrators and victims.
Grade Mode: Letter Grading

SOC 530 - Sociology of Race and Ethnicity
Credits: 4
This course examines how social scientists study racial and ethnic groups. Students first gain knowledge of important sociological concepts, and then read from a diverse array of social theorists. Towards the end of the course, students engage with cutting-edge applied research on race and ethnicity across many dimensions including wealth, health, crime, love, and technology. By the end of the course, students should be able to identify, explain, and apply various sociological concepts and theories pertaining to race and ethnicity; and be able to conceptualize, hypothesize, and design a line of scientific inquiry on race.
Attributes: Social Science (Discovery)
Grade Mode: Letter Grading

SOC 535 - Homicide
Credits: 4
An introduction to theory and research in homicide studies, including a review of the origins of and social responses to homicide.
Grade Mode: Letter Grading

SOC 555 - Death and Dying in America
Credits: 4
This course will explore a cultural and structural overview of death and dying in American society. Topics include the historical contexts of the care and treatment of the dying and the dead; attitudes toward death; bereavement over the life course; socialization to death; anticipatory grief and terminal illness; funeral rituals and their social functions; burial, mourning and grief practices; and suicide and assisted suicide. Cannot earn credit if previously taken SOC 597 "Special Topics: Death and Dying in America".
Grade Mode: Letter Grading

SOC 565 - Environment and Society
Credits: 4
Environment and Society focuses on the complex interactions between human communities and the natural world. The course considers the interconnected ways that social systems, the built environment, and related technologies produce environmental changes, and in turn how shifts in resources, air, water quality, climate, biodiversity, and ecosystems force societies to adapt. This course fulfills in the Environment, Technology, and Society category of UNH's Discovery Program.
Attributes: Environment,TechSociety(Disc)
Grade Mode: Letter Grading

SOC 570 - Sexual Behavior
Credits: 4
This course approaches sexuality as a social phenomenon. We examine variability in sexual practices, sexual identities, and sexual behaviors throughout history, across cultures, and throughout the life course of individuals. Particularly, we focus on the social control of sexuality and the extent to which sexualities are socially constructed. We consider the media and other cultural influences on a diverse range of sexual experiences and take a straightforward, non-stigmatizing approach to tackling controversial issues.
Grade Mode: Letter Grading

SOC 595 - Independent Reading and Research
Credits: 2-8
Independent study of advanced or specialized topics in sociology requiring extensive reading and writing. Before registering, students must develop a project in consultation with a faculty supervisor and submit a proposal to the undergraduate committee. Students are required to complete 12 sociology credits prior to taking this course.
Grade Mode: Letter Grading

SOC 598 - Sociological Theory
Credits: 4
Analysis of the origins and development of sociological theory. Includes the classical works of Marx, Weber, and Durkheim and their connections to the major strands of present day research.
Attributes: Writing Intensive Course
Equivalent(s): SOC 611
Grade Mode: Letter Grading

SOC 599 - Sociological Analysis
Credits: 4
Basic skills essential to sociological study, including: development of critical reading skills; evaluation of theory construction and evidence; analysis of classic and contemporary works, research, writing, and use of library resources. To be taken by sociology majors no later than the junior year.
Attributes: Inquiry (Discovery); Writing Intensive Course
Equivalent(s): SOC 599W
Grade Mode: Letter Grading

SOC 601 - Methods of Social Research
Credits: 4
Overview of major research methods: survey analysis, personal interview, participant observation, content analysis, and experimental design. Each student designs and completes a research project.
Attributes: Writing Intensive Course
Prerequisite(s): SOC 599 with a minimum grade of D-.
Equivalent(s): PSYC 502, SW 601, SW 601W
Grade Mode: Letter Grading

SOC 620 - Drugs and Society
Credits: 4
Provides students with an overview of drug using behavior as viewed from a sociological perspective. Highlights historical and current drug use trends, examines the social correlates of drug use, considers societal responses to drug use including treatment, prevention, and policy, and engages students in key controversial debates confronting U.S. citizens and policymakers. Provides a foundation for understanding of drugs and society.
Grade Mode: Letter Grading

SOC 625 - Mental Health and Society
Credits: 4
This course introduces students to sociological approaches for studying and understanding mental health and illness in society. With an emphasis on the importance of social stress, we examine the distribution of mental illness in the United States and identify the factors that help to explain mental health differences across social roles and statuses.
Grade Mode: Letter Grading

SOC 627 - Sociology of Fashion
Credits: 4
This course explores how clothing, accessories, and bodily adornment are socially constructed processes. We apply a sociological lens to uncover how fashion intersects with: social identities and aspirations; fads and trends; historical forces; how we modify our bodies; production and consumption of clothing and shoes; race, class, and gender; labor and human rights; globalization and trade; technology, and environmental issues in clothing production. Cannot earn credit if previously earned credit for SOC 697 "Special Topics Sociology of Fashion".
Grade Mode: Letter Grading

SOC 635W - Medical Sociology
Credits: 4
Health and Illness are considered as a sociocultural phenomenon. Meanings are attached to health and illness as they are influenced by our social values and our cultural beliefs, which to a large degree are influenced by available medical technologies. People's experiences of health and illness are shaped by a range of social factors (e.g., race, class, gender) and follow clear patterns of social inequality. A critical approach is taken to examine topics such as the social determinants of health, illness and healthcare; the social construction of illness; the medicalization of society; and the social organization of health care.
Attributes: Writing Intensive Course
Equivalent(s): SOC 635
Grade Mode: Letter Grading

SOC 636 - Sociology of Justice
Credits: 4
In this course, students will begin to understand how individuals, groups, and societies perceive justice, how to research those perceptions, and how those perceptions shape our lives. By the end of this course, students should have an advanced understanding of justice research and be able to apply sociological research principles to examining wide variety of real-world issues.
Grade Mode: Letter Grading

SOC 645 - Class, Status and Power
Credits: 4
Focuses on the major dimensions of inequality, including class, gender, and race, by exploring the distribution of economic, political, and social resources within contemporary societies.
Equivalent(s): SOC 645W
Grade Mode: Letter Grading

SOC 647 - Sociology of Work and Well-Being
Credits: 4
What constitutes a 'good job' or a 'bad job'? What characteristics of jobs are harmful, and which job conditions protect worker health and wellbeing? In this course, we focus heavily on the nature of job stress, where it comes from, and why some people experience more of it than others. Topics will include socioeconomic disparities in stress exposure, gender and racial discrimination in the workplace, gig work and online platforms, social protection policies, and COVID-19. Cannot earn credit if already taken SOC 697 under the special topic "Work and Well-Being".
Grade Mode: Letter Grading

SOC 665 - Environmental Sociology
Credits: 4
Interactions between society and the physical environment, including environmental constraints, population and economic growth, social impacts of resource development, large-scale environmental change, and the social bases of environmental attitudes, behavior, and politics.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

SOC 693 - Global Change and Social Sustainability
Credits: 4
Achieving "social sustainability" has become a goal for societies around the world, but what does it mean and how can they achieve it? Sociology provides scientific tools to help answer these questions. In this course, students will learn sociological approaches for investigating and analyzing global social challenges ranging from climate change and food insecurity to drug trafficking and health pandemics and consider applications of these insights to inform on-the-ground efforts to advance social sustainability.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

SOC 697 - Special Topics
Credits: 4
Occasional or experimental offerings. May be repeated for different topics.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to 2 times.
Grade Mode: Letter Grading

SOC 720 - Sociology of Drug Use
Credits: 4
Examines licit and illicit drug use from a sociological perspective. Draws primarily from the sociology of mental health and criminology to explore a variety of drug-related topics including historical and current U.S. drug trends, dominant theoretical approaches about the initiation into, and continued use of drugs, drug-related crime, therapeutic use of drugs, prevention and treatment of drug problems, and drug-related policies.
Grade Mode: Letter Grading

SOC 725 - Social Demography
Credits: 4
Social demography examines the linkages between changes in the size, composition and distribution of the population and changes in social, environmental, economic and political factors. The course examines demographic methods and the materials and the analytical techniques used by demographers to analyze population redistribution, fertility, work, marriage, migration and mortality. The policy implications of demographic change will be examined with attention to the U.S. as well as the developed and developing world.
Grade Mode: Letter Grading

SOC 730 - Communities and the Environment
Credits: 4
People and the natural environments in which they live fundamentally structure communities around the globe. Economic change, expanding development , and human migration are transforming social and environmental conditions in both rural and urban settings, altering the identities of many communities as well as their relationships with the natural world. The importance of these emerging social and environmental issues has made them a focus for social science inquiry. This course exposes students to a range of sociological concepts, theories, and research approaches related to the study of communities and environmental issues. Some of the substantive themes that are covered include: population dynamics and environmental change; social capital and social networks; political economy and community development; collective action and social movements; science, technology, and environmental risks; and environmental racism and justice. The principal assignment for the course will be a research project where students investigate a community or environmental issue of their own interest.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

SOC 740 - Sociology of Mental Health
Credits: 4
Introduces students to different sociological approaches for studying and understanding mental health and illness. Students examine the social distribution of mental illness in the United States and the social-structural factors that help to explain mental health variations. Also addresses issues surrounding mental health treatment, systems, and policies for the mentally ill.
Grade Mode: Letter Grading

SOC 773 - Childhood and Social Policy
Credits: 4
Exposes students to a variety of sociological perspectives about childhood in American society. Stimulates analysis about how social institutions, like the modern family, school, economic system, justice system and communications media affect children. Assumes prior understanding of important sociological concepts, critical thinking skills and social science writing ability.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

SOC 792 - Internship Independent Study
Credits: 2-8
Provides upper level sociology majors with an opportunity to apply what they have learned in the classroom to the real world. This will provide the opportunity for students to work individually with a faculty member on an Internship with the option of variable credit. There is no formal class time required. Students will arrange meetings with supervising faculty to plan assigned readings, update internship progress and complete semester projects. Project ideas are developed with faculty and internship site supervisor.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

SOC 799 - Senior Thesis
Credits: 4 or 8
Independent work in the library or field culminating in a written senior thesis. Recommended for, but not confined to, majors intending to pursue graduate studies. Students must arrange for supervision from two faculty members and submit a proposal to the Undergraduate Committee before registering. May be completed in one or two successive semesters during the senior year.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 2 times.
Equivalent(s): SOC 699
Grade Mode: Letter Grading

SOC 799H - Senior Honors Thesis
Credits: 4 or 8
Independent work in the library or field culminating in a written senior honors thesis and a formal research presentation. Recommended for, but to confined to, majors intending to pursue graduate studies. Required for students participating in the departmental honors program as part of their 16 honors credits. Students must arrange for supervision from two faculty members and submit a proposal to the Undergraduate Committee before registering. May be completed in one or two successive semesters during the senior year.
Attributes: Honors course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): SOC 699H
Grade Mode: Letter Grading

Sociology (SOCI) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SOCI 410 - Introduction to Sociology
Credits: 4
This course introduces basic concepts, theories, and methods in the discipline of sociology that reveal the relationship between the individual and society and challenge students to develop a sociological perspective. Students are exposed to diverse cultures and social structures with an emphasis on the dynamics of power and inequality on the local, national, and global levels as they are influenced by the social constructs of race, ethnicity, class, gender and sexuality.
Attributes: HumanBehavSocial Sys (Gen Ed); Social Science (Discovery)
Equivalent(s): SOC 501G
Grade Mode: Letter Grading

SOCI 601 - Society and the Individual
Credits: 4
This course explores the interface between individuals and their social context. It uses sociological perspectives such as symbolic interactionism, functional theory, and conflict theory to examine the relationships we as individuals have with our society. The course also examines the extent to which our roles and statuses are determined at birth, and the roles we play in shaping ourselves as well as the institutions in which we live. How social factors influence individual perceptions and choices is viewed in the context of the institution of marriage; family structure and relationships; demographics such as age, gender, race, ethnicity, and class; attitudes and moral behavior; violence and aggression; and work and authority.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D-.
Equivalent(s): SOC 601G
Grade Mode: Letter Grading

SOCI 603 - Work and Society
Credits: 4
This course analyzes the social nature of work in industrial societies. Topics include the study of occupations, training, automation, unemployment, and the role of minorities in the workplace. Through ethnographic case studies and recent articles, the course compares work structures in North America, Asia, and Europe.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D- or CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D- or PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-.
Equivalent(s): SOC 603G
Grade Mode: Letter Grading

SOCI 675 - Child Abuse and Neglect
Credits: 4
This course provides an examination of child maltreatment from a variety of perspectives, including theoretical, cultural, historical, and legal. It offers definitions of the types of child abuse and neglect, and allows students to reflect on how culture and history play roles in the defining process. Students learn to identify signs and symptoms resulting from maltreatment, and take an in-depth look at how trauma affects all areas of child development. The roles of child protection workers, the complex child protection system, and the legal systems are explained. Students have the opportunity to critically review current research and debate emotionally charged ethical issues. This course challenges students to consider the dynamics that may lead people to harm children and connect the development of prevention strategies to these variables.
Attributes: HumanBehavSocial Sys (Gen Ed)
Prerequisite(s): PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D- or CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D- or PSY 525 with a minimum grade of D- or PSY 509G with a minimum grade of D- or PSY 470 with a minimum grade of D- or PSY 508G with a minimum grade of D-.
Equivalent(s): SOC 607G
Grade Mode: Letter Grading

SOCI 680 - Issues of Addiction in Special Populations
Credits: 4
This course explores important complications that arise when dealing with addiction-related issues of special populations (e.g., children, homeless, criminal justice system involvement, gender, sexual orientation). Emphasis will be placed on exploring the ways to educate and connect people to the services available.
Prerequisite(s): (PSY 410 with a minimum grade of D- or PSY 501G with a minimum grade of D- or SOCI 410 with a minimum grade of D- or SOC 501G with a minimum grade of D- or CRIM 410 with a minimum grade of D- or CRIM 500G with a minimum grade of D-) and (PSY 565 with a minimum grade of D- or PSY 515G with a minimum grade of D-).
Equivalent(s): SOC 612G
Grade Mode: Letter Grading

Spanish (SPAN)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SPAN 401 - Elementary Spanish I
Credits: 4
For students with no previous knowledge of Spanish. Development of listening comprehension, speaking, reading, and writing skills, as well as cultural awareness of the Hispanic world. No credit for students who have had two or more years of Spanish in secondary school; however, any such students whose studies of Spanish have been interrupted for 5 years or more should consult the coordinator of elementary Spanish. SPAN 401-402 taken together satisfy the foreign language requirement.
Grade Mode: Letter Grading

SPAN 402 - Elementary Spanish II
Credits: 4
Conducted in Spanish. Development of listening comprehension, speaking, reading, and writing skills, as well as cultural awareness of the Hispanic world. Cannot be taken separately without permission of the instructor. SPAN 401-402 taken together satisfy the foreign language requirement.
Attributes: Foreign Language Requirement
Prerequisite(s): SPAN 401 with a minimum grade of D-.
Mutual Exclusion: No credit for students who have taken HUMN 565.
Grade Mode: Letter Grading

SPAN 403 - Review of Spanish
Credits: 4
Conducted in Spanish. Accelerated elementary Spanish course, designed for those who have had only 2 years of High school Spanish. Does not satisfy the foreign language requirement. Preparation for Spanish 503.
Grade Mode: Letter Grading

SPAN 503 - Intermediate Spanish I
Credits: 4
Conducted in Spanish. Further development of reading, writing, speaking, and listening skills. Development of intercultural awareness through discussion and short papers in Spanish based on authentic texts from the Hispanic world. Counts toward the major and the minor in Spanish. Satisfies the Foreign Language Requirement.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Equivalent(s): SPAN 503H
Grade Mode: Letter Grading

SPAN 504 - Intermediate Spanish II
Credits: 4
Conducted in Spanish. Further development of reading, writing, speaking, and listening skills. Development of intercultural awareness through discussion and short papers in Spanish based on authentic texts from the Hispanic world. Counts towards the major and minor in Spanish. Satisfies the foreign language requirement.
Attributes: World Cultures(Discovery); Foreign Language Requirement
Prerequisite(s): SPAN 503 with a minimum grade of D-.
Equivalent(s): SPAN 504H
Grade Mode: Letter Grading

SPAN 525 - Introduction to Spanish Cultures
Credits: 4
Historical, geographical, and artistic expressions of Spanish cultures that have formed the character of contemporary Spanish culture. Majors may take either SPAN 525 or SPAN 526 or another English language course with advisor approval, but only one can be counted for major credit.
Attributes: World Cultures(Discovery)
Grade Mode: Letter Grading

SPAN 526 - Introduction to Latin American Cultures
Credits: 4
Significant historical, geographical, and artistic expressions of pre-Colombian and Latin America cultures. Conducted in English. Counts towards the major and the minor in Spanish.
Attributes: World Cultures(Discovery)
Equivalent(s): SPAN 526H
Grade Mode: Letter Grading

SPAN 595 - Practicum
Credits: 2-4
Practical use of Spanish language or cultural skills outside the classroom through special projects.
Repeat Rule: May be repeated for a maximum of 4 credits.
Grade Mode: Letter Grading

SPAN 631 - Advanced Conversation and Composition I
Credits: 4
Emphasis on presentational, interpersonal, written or spoken Spanish through in-class and online discussions and frequent out of class assignments based on cultural and literary readings and films.
May include service learning option. Satisfies the foreign language requirement. Required for Spanish major and minor. The course sequence SPAN 631-SPAN 632 may be taken in any order.
Attributes: World Cultures(Discovery); Writing Intensive Course; Foreign Language Requirement
Prerequisite(s): SPAN 504 with a minimum grade of D-.
Equivalent(s): SPAN 631H
Grade Mode: Letter Grading

SPAN 632 - Advanced Conversation and Composition II
Credits: 4
Emphasis on presentational, interpersonal, written or spoken Spanish through in-class and online discussions and frequent out of class assignments based on cultural and literary readings and films.
May include service learning option. Satisfies the foreign language requirement. The course sequence SPAN 632-SPAN 631 may be taken in any order.
Attributes: World Cultures(Discovery); Writing Intensive Course; Foreign Language Requirement
Prerequisite(s): SPAN 504 with a minimum grade of D-.
Equivalent(s): SPAN 632H
Grade Mode: Letter Grading

SPAN 641 - Spanish Language Variation & Change
Credits: 4
This course introduces students to the variation in the Spanish spoken today in Spain, Latin America, and the U.S. Students will improve speaking and listening skills through close study of pronunciation and language variation (geographic, social class, age, gender/sexuality, etc.). Students will deepen their understanding of language and culture through examining the relationship between language variation and language change in the Spanish-speaking world. This class is conducted in Spanish.
Prerequisite(s): SPAN 631 with a minimum grade of D- or SPAN 632 with a minimum grade of D-.
Grade Mode: Letter Grading

SPAN 645 - Intro to Spanish Linguistics
Credits: 4
Establishes the basis for future application of linguistic principles. Explores different areas of linguistics including morphology, word formation and verbal inflection. Issues in syntax and semantics are analyzed both in isolation and in terms of their relationship to each other. Students will be equipped with the skills necessary to apply these linguistic concepts to actual Spanish language data and to achieve a better understanding of the structures governing the language they are studying. Conducted in Spanish.
Prerequisite(s): SPAN 631 with a minimum grade of D- or SPAN 632 with a minimum grade of D-.
Grade Mode: Letter Grading

SPAN 647 - Topics in Hispanic Cultural Studies
Credits: 4
Contemporary approaches to the study of Hispanic cultural practices and perspectives that examine the intersections of politics, art, religion and the forces of globalization with the aim of further development of intercultural competence. Conducted in Spanish. May be taken more than once for credit if no duplication of content.
Prerequisite(s): SPAN 631 with a minimum grade of D- or SPAN 632 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

SPAN 648 - The Hispanic World Today
Credits: 4
This course focuses on researching and discussing contemporary issues in Spain and/or Latin America while improving reading and oral performance. Primary sources include newspapers, resources from the internet, and/or archival materials.
Prerequisite(s): SPAN 631 with a minimum grade of D- or SPAN 632 with a minimum grade of D-.
Equivalent(s): SPAN 691, SPAN 692
Grade Mode: Letter Grading

SPAN 650 - Hispanic Literature and Popular Culture
Credits: 4
The study of literary texts and popular literary art forms.
Attributes: Writing Intensive Course
Prerequisite(s): SPAN 631 with a minimum grade of D- or SPAN 632 with a minimum grade of D-.
Grade Mode: Letter Grading

SPAN 652 - Introduction to Spanish Literature and Thought
Credits: 4
This course provides an overview of contemporary Spanish literature spanning the eighteenth, nineteenth, and twentieth centuries. Through the examination of its most representative texts, the course explores how these works serve as expressions of aesthetic-literary movements and specific historical periods. The curriculum covers the Romantic period, realism and naturalism, the Generation of '98 and modernism, the Generation of '27 and avant-garde movements, the literature generated by the Civil War, and the production of the second half of the twentieth century. Upon completion of the course, students should acquire a comprehensive understanding of the key authors and texts of contemporary Spanish literature. They should also develop the ability to discern various literary styles and movements through textual analysis. Additionally, students should be able to connect literary texts to contemporary historical, philosophical, and aesthetic factors and periods.
Attributes: Writing Intensive Course
Prerequisite(s): SPAN 631 with a minimum grade of D- or SPAN 632 with a minimum grade of D-.
Grade Mode: Letter Grading

SPAN 654 - Introduction to Latin American Literature and Thought
Credits: 4
Reading and analysis of major works within the historical, cultural, and social background of Latin America. Emphasis on works in the 20th-21st century. Conducted in Spanish.
Attributes: Humanities(Disc); Writing Intensive Course
Prerequisite(s): SPAN 631 with a minimum grade of D- or SPAN 632 with a minimum grade of D-.
Grade Mode: Letter Grading

SPAN 683 - Summer Study in Costa Rica
Credits: 0 or 8
Studies in San Joaquin de Flores, Costa Rica. Six week summer immersion program for undergraduate students. Interested students should contact the program director.
Co-requisite: INCO 589
Attributes: Foreign Language Requirement
Grade Mode: Credit/Fail Grading
Special Fee: Yes

SPAN 686 - Study Abroad/Granada
Credits: 0 or 20
Studies in Granada, Spain. Noncredit orientation meetings required during semester prior to departure. Interested students should consult with the program directors. (An IA [continuous grading] grade will be assigned until official transcript is received from the foreign institution.)
Co-requisite: INCO 588
Attributes: World Cultures(Discovery)
Grade Mode: Credit/Fail Grading
Special Fee: Yes

SPAN 790 - Topics in Second Language Acquisition/Pedagogy/ Methodology
Credits: 4
A) Introduction to Second Language Acquisition, B) Internet Technologies and Second Language Learning. May be taken more than once if no duplication of content.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

SPAN 795 - Independent Study
Credits: 1-4
Guided individual study with training in bibliography and organization of materials. Topics selected by instructor and student in conference. Barring duplication of content, may be repeated for credit.
Repeat Rule: May be repeated up to unlimited times.
Equivalent(s): SPAN 797
Grade Mode: Letter Grading

SPAN 797 - Topics in Hispanic Literary and Cultural Studies
Credits: 4
A) Medieval Spanish Literature, B) Spanish Literature of the Renaissance and the Golden Age, C) Spanish Literature of the 18th and 19th Centuries, D) Spanish Literature of the 20th Century (Poetry/Theater/Prose,), E) Contemporary Spanish Literature, F) Spanish Cultural Studies, G) Latin American Literature of the 16th and 17th Centuries, H) Latin American Literature of the 18th and 19th Centuries, I) 20th Century Latin American Literature (Poetry/Theater/Prose), J) Contemporary Latin American Literature, K) Cyberliterature and Cyberculture, L) Transatlantic Studies, M) Spanish and Latin American Philosophy and Essay, N) Indigenous Cultural Expression of the Americas, O) Hispanic Film Studies, P) U.S. Hispanic Cultural Studies, Q) Latin American Cultural Studies, R) Senior Seminar, S) Other. May be taken more than once for credit if no duplication of content. Any course in this category can be counted as your major discover capstone. Consult with your advisor.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 16 credits.
Equivalent(s): SPAN 799
Grade Mode: Letter Grading

SPAN 798 - Topics in Hispanic Linguistics and Cultural Studies
Credits: 4
A) History of the Spanish Language, B) Study of Spanish Mood and Aspect, C) Sociolinguistics of Spanish, D) Discourse Analysis, E) Politeness and Pragmatics, F) Bilingualism and Spanish in the U.S., G) Spanish Pronouns, Agreement and Modifiers, H) Regional and Social Variation in Spanish Phonetics, I) Other. May be taken more than once for credit if no duplication of content. Any course in this category can be counted as your major discovery capstone. Consult with your advisor.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

SPAN 799 - Senior Honors
Credits: 4
For senior Spanish majors with a minimum cumulative grade-point average of 3.40 and the same or better average in the major who want to undertake a special honors project in an area of Spanish language or literature of their choice.
Attributes: Honors course
Grade Mode: Letter Grading

Speech Language Assistant (SLA) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SLA 500 - Role of the Speech-Language Assistant
Credits: 4
This course is designed to provide students with an overview of the profession of a Speech-Language Assistant. Topics include professional ethics, an introduction to the American Speech-Language Hearing Association's (ASHA) guidelines for becoming a registered Speech Language Assistant (SLA), and the roles and responsibilities of a SLA. Observing, documenting, defining, and writing goals and objectives in educational and medical settings is also addressed. Acknowledging the difference between immediate and long-term accommodations, working as part of a team, recognizing appropriate health and safety precautions, and working effectively with cultural differences in diverse populations are core aspects of the course.
Attributes: Writing Intensive Course
Equivalent(s): COMM 511G, INST 511G
Grade Mode: Letter Grading

SLA 501 - Survey of Communication Disorders
Credits: 4
This course provides students with knowledge of the basic components and development of speech and language. Historical aspects of Speech-Language and Audiology are addressed. Various disorders including language, articulation, voice, fluency, and hearing are explored.
Prerequisite(s): SLA 500 with a minimum grade of D- or COMM 511G with a minimum grade of D-.
Equivalent(s): COMM 512G, INST 512G
Grade Mode: Letter Grading

SLA 502 - Anatomy and Physiology of Speech and Hearing
Credits: 4
This course is designed to provide students in the speech-language concentration with knowledge of the basic anatomy and physiology of the speech production and perception systems to support understanding of directions from a Speech-Language Pathologist. The focus is on those aspects of anatomy and physiology that are critical for clinical implementation. Measurement tools and instrumentation used in the field are discussed.
Prerequisite(s): SLA 500 with a minimum grade of D-.
Equivalent(s): COMM 513G, INST 513G
Grade Mode: Letter Grading

SLA 503 - Articulation and Phonological Disorders
Credits: 4
This course introduces phonetic principles, categorization of sounds, and various applications of these concepts. Students become familiar with the International Phonetic Alphabet (IPA), learn to read a Speech-Language Pathologist's transcription, and develop their own transcription skills. Articulation and phonological disorders are presented and distinctions and direct connections discussed, with the primary emphasis on intervention and remediation strategies. Additional topics include children and adults for whom English is a second language, and individuals with dialectic and/or cultural differences.
Prerequisite(s): SLA 500 with a minimum grade of D-.
Equivalent(s): COMM 514G, INST 514G
Grade Mode: Letter Grading

SLA 504 - Introduction to Audiology and Aural Rehabilitation
Credits: 4
This course is designed to equip Speech-Language Assistant students with knowledge of the hearing process, symptoms of hearing impairment, basic methods by which an audiologist diagnoses hearing difficulties, and elements of rehabilitative approaches for persons with hearing impairment. An overview of various causes of hearing impairment is explored.
Prerequisite(s): SLA 500 with a minimum grade of D-.
Equivalent(s): COMM 515G, INST 515G
Grade Mode: Letter Grading

SLA 506 - Language Acquisition
Credits: 4
This course introduces research, theory, and practical applications pertinent to first language acquisition. The development of language is explored through its five major components: phonology, pragmatics, semantics, morphology, and syntax. Stages of acquisition are traced from pre-linguistic communication in infancy through adolescents' use of abstract thinking and expressions. Distinctions between language disorders and developmental differences are considered, as are relationships between language and literacy skills (reading and writing).
Attributes: Writing Intensive Course
Prerequisite(s): SLA 500 with a minimum grade of D-.
Equivalent(s): PSY 521G
Grade Mode: Letter Grading

SLA 550 - Clinical Practicum I
Credits: 2
This course offers supervised clinical experience in speech-language pathology. Students gain practical experience in techniques and theories as applied in a therapeutic setting. Requires students to be on-site at an approved setting for a minimum of twenty-five hours during the term.
Prerequisite(s): SLA 500 with a minimum grade of D- and SLA 501 with a minimum grade of D-.
Equivalent(s): COMM 516G, INST 516G
Grade Mode: Letter Grading

SLA 551 - Clinical Practicum II
Credits: 2
This course provides students in the Speech-Language Assistant concentration with a series of introductory fieldwork experiences during which they will observe Speech-Language Pathologists as they provide speech and language therapy to clients. Students gain practical experience in observing techniques and theories as applied in a therapeutic setting. Twenty-five hours of observation are required for each two-credit practicum, in settings approved by the clinical faculty.
Prerequisite(s): SLA 550 with a minimum grade of D- or COMM 516G with a minimum grade of D-.
Equivalent(s): COMM 516AG, INST 516AG
Grade Mode: Letter Grading

SLA 552 - Clinical Practicum III
Credits: 2
This course provides students in the Speech-Language Assistant concentration with a series of introductory fieldwork experiences during which they will observe Speech-Language Pathologists as they provide speech and language therapy to clients. Students gain practical experience in observing techniques and theories as applied in a therapeutic setting. Twenty-five hours of observation are required for each two-credit practicum, in settings approved by the clinical faculty.
Prerequisite(s): SLA 551 with a minimum grade of D- or COMM 516G with a minimum grade of D-.
Equivalent(s): COMM 516BG, INST 516BG
Grade Mode: Letter Grading

SLA 553 - Clinical Practicum IV
Credits: 2
This course provides students in the Speech-Language Assistant concentration with a series of introductory fieldwork experiences during which they will observe Speech-Language Pathologists as they provide speech and language therapy to clients. Students gain practical experience in observing techniques and theories as applied in a therapeutic setting. Twenty-five hours of observation are required for each two-credit practicum, in settings approved by the clinical faculty.
Prerequisite(s): SLA 552 with a minimum grade of D- or COMM 516BG with a minimum grade of D-.
Equivalent(s): COMM 516CG, INST 516CG
Grade Mode: Letter Grading

SLA 555 - Clinical Practicum II
Credits: 6
This course offers supervised clinical experience in speech-language pathology. Students gain practical experience in techniques and theories as applied in a therapeutic setting. Requires students to be on-site at an approved setting for a minimum of seventy-five hours during the semester.
Prerequisite(s): SLA 500 with a minimum grade of D- and SLA 501 with a minimum grade of D- and SLA 502 with a minimum grade of D- and SLA 503 with a minimum grade of D- and SLA 504 with a minimum grade of D- and SLA 506 with a minimum grade of D- and SLA 550 with a minimum grade of D-.
Grade Mode: Letter Grading

Sports Management & Leadership (SML)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SML 521 - Theory of Coaching Basketball
Credits: 2
Individual team offense and defense, rules of the game. Problems in team handling and conditioning.
Prerequisite(s): (SPST 565 (may be taken concurrently) with a minimum grade of D- or SML 565 (may be taken concurrently) with a minimum grade of D-).
Equivalent(s): KIN 521, SPST 521
Grade Mode: Letter Grading

SML 522 - Theory of Coaching Football
Credits: 2
Systems of play, team and individual offensive and defensive fundamentals, theory and strategy of team play, coaching methods, physical conditioning, rules.
Equivalent(s): KIN 522, SPST 522
Grade Mode: Letter Grading

SML 523 - Theory of Coaching Ice Hockey
Credits: 2
Basic hockey skills. Fundamentals of individual and team offense and defense; coaching methods; rules. Student must have basic skating skills prior to taking course.
Prerequisite(s): (SPST 565 (may be taken concurrently) with a minimum grade of D- or SML 565 (may be taken concurrently) with a minimum grade of D-).
Equivalent(s): KIN 523, SPST 523
Grade Mode: Letter Grading
Special Fee: Yes

SML 525 - Theory of Coaching Soccer
Credits: 2
Fundamental and advanced skills and techniques; offensive and defensive principles of team play; tactical formations and strategy; methods of training and practicing; rules.
Equivalent(s): KIN 525, SPST 525
Grade Mode: Letter Grading

SML 528 - Theory of Coaching Track and Field
Credits: 2
Starting, sprinting, middle-distance and distance running, relay, hurdling, high and broad jumping, pole vault, shot putting, discus, hammer, and javelin. Methods of training and practicing.
Equivalent(s): KIN 528, SPST 528
Grade Mode: Letter Grading

SML 560 - Sport Psychology
Credits: 4
Introduction to the discipline of sport psychology. Explores behavioral, cognitive, and social psychology in relation to elite, collegiate and high school athletes, as well as recreational sport participants.
Equivalent(s): KIN 560, SPST 560
Grade Mode: Letter Grading

SML 561 - History of American Sport and Physical Culture
Credits: 4
Major individuals, organizations, and trends that influenced the development of an American industry in sports, active recreation, and physical fitness. Readings, discussions, and research projects provide experience in the craft and utility of history.
Attributes: Historical Perspectives(Disc)
Equivalent(s): KIN 561, KIN 561W, SPST 561, SPST 561W
Grade Mode: Letter Grading

SML 561W - History of American Sport and Physical Culture
Credits: 4
Major individuals, organization and trends that influenced the development of an American industry in sports, active recreation, and physical fitness. Reading, discussions and research projects provide experience in the craft and utility of history.
Attributes: Historical Perspectives(Disc); Writing Intensive Course
Equivalent(s): KIN 561W, SPST 561W
Grade Mode: Letter Grading

SML 562 - Sport Media Relations
Credits: 4
A survey of basic concepts of sports media relations for students considering careers in school or college sports coaching or administration, media or related fields. The focus is on developing necessary skills, techniques and recommended media relations practices as well as social implications of the media in sports public relations including print, radio, television, the World Wide Web and social media.
Equivalent(s): KIN 562, SPST 562
Grade Mode: Letter Grading

SML 564 - Introduction to Sport Marketing
Credits: 4
An introductory study of sport marketing, which includes the basic principles, key scholars, relevant scholarship, and necessary experiential elements to aid students in understanding the discipline's applied and academic aspects. This course will introduce traditional marketing concepts as well as focus on the marketing of sport and through sport.
Equivalent(s): KIN 564, SPST 564
Grade Mode: Letter Grading

SML 565 - Principles of Coaching
Credits: 4
Overviews current theory and practice in coaching education, including sport pedagogy, physiology, psychology, administration and risk management. Issues of performance and competition specific to child, youth and collegiate coaching are addressed.
Equivalent(s): KIN 565, SPST 565
Grade Mode: Letter Grading

SML 565A - Clinical Practice in Coaching
Credits: 2
Students will learn and utilize best practices in the field to create safe, positive and effective coaching environments while teaching technical and tactical sport skills. Group management, motivation skill progression, evaluation and feedback will be explored. An emphasis will be placed on writing and implementing practice objectives, as well as effective practice design and execution. This course will include weekly practical coaching sessions.
Prerequisite(s): SML 565 with a minimum grade of D- or SPST 565 with a minimum grade of D-.
Equivalent(s): SPST 565A
Grade Mode: Letter Grading

SML 568 - Global Perspectives in Sport
Credits: 4
Global Perspectives in Sport explores the intersections of management and the cross cultural context of sport in examining issues and challenges in sport around the globe. This course will prepare students to think critically about the organization, governance, business activities, and cross-cultural context of modern sport on an international level.
Equivalent(s): KIN 568, SPST 568
Grade Mode: Letter Grading

SML 580 - Sport Industry
Credits: 4
Overviews the various segments that make up the sport industry, including governing bodies, the mass media, sporting goods firms, players' and coaches' associations, public regulatory agencies, and secondary and higher education. Readings and discussions consider the development and structure of each segment. interaction between segments, legal issues, and policy implications. While the course will focus on the United States, there is some comparison to other countries.
Equivalent(s): KIN 580, SPST 580
Grade Mode: Letter Grading

SML 630 - Sport Facility and Event Management
Credits: 4
Students learn the principles and processes involved in effective sport facility and event management. In terms of facilities, students explore the concepts of facility design, planning, systems, risk management, marketing, and ownership. In terms of events, students explore the concepts of creation, impact(s) on host communities, marketing/ sponsorship, and the potential positive and negative outcomes of sport events.
Equivalent(s): KIN 630, SPST 630
Grade Mode: Letter Grading
Special Fee: Yes

SML 631 - Sport Media Production
Credits: 4
Sport media professionals are expected to write their own scripts, produce their own content, and distribute that content on multiple digital platforms. Sport Media Production is designed to combine media management with production work in digital media, video, podcasting and website design. This course examines many of the current distribution platforms (Twitter, Facebook, Youtube, blogs, mobile applications) and the tools to create media for these outlets. In this course, students will create media using Adobe Creative Cloud and current video-editing systems.
Prerequisite(s): (SML 562 with a minimum grade of D- or SPST 562 with a minimum grade of D-).
Equivalent(s): KIN 631, SPST 631
Grade Mode: Letter Grading

SML 634 - Sport Sponsorship and Sales
Credits: 4
The goal of this course is for students to develop an understanding of all aspects of sport sales and sponsorship. This course will explain the intricacies of both sport sales and sport sponsorship as well as demonstrate the ways they overlap and differ. Specifically, this course will cover concepts such as aftermarketing, up-selling, benefit selling, and sponsorship proposals.
Equivalent(s): KIN 634, SPST 634
Grade Mode: Letter Grading

SML 643 - Social Media Marketing in Sport
Credits: 4
Students examine the use of social media as a tool in the marketing of sport and sport-related products. They are expected to effectively analyze and prescribe different ways in which social media can enhance the marketing profile of such products upon course completion. Student work should facilitate a deep understanding of social media in its constituent forms as they apply to sport and students should be able to examine such use critically.
Equivalent(s): KIN 643, SPST 643
Grade Mode: Letter Grading

SML 645 - Leadership in Sport
Credits: 4
This course examines leadership theories and behavior as it relates to the sport industry. Students will study leadership behavior as it relates to coaching, administering athletic departments or programs, and directing sport-related businesses. Additionally, this course will explore the ethical issues dilemmas, and ethical decision-making process sport managers face in professional, collegiate and interscholastic sport.
Equivalent(s): SPST 645
Grade Mode: Letter Grading

SML 650C - Internship in Sport Management and Leadership
Credits: 1-4
Experiential learning in a setting appropriate to the major option and to student's objectives. A 4-credit internship requires a minimum of 150 hours experience; fewer credits will require proportionally fewer hours. May be on- or off-campus with an approved organization. Student must participate in securing the internship. A journal, bi-weekly reports and a final paper required. May be repeated, with no more than 8 credits taken in any given semester.
Repeat Rule: May be repeated for a maximum of 12 credits. May be repeated up to 2 times.
Equivalent(s): KIN 650C, SPST 650C
Grade Mode: Letter Grading

SML 650D - Internship in Coaching
Credits: 2-4
Experiential learning in a setting appropriate to student's learning objectives in coaching. May be on- or off-campus with an approved organization. Student must participate in securing the assistantship. A journal, bi-weekly reports, and final report required.
Prerequisite(s): (SPST 565 with a minimum grade of D- or SML 565 with a minimum grade of D-).
Repeat Rule: May be repeated for a maximum of 12 credits.
Equivalent(s): KIN 650D, SPST 650D
Grade Mode: Letter Grading

SML 693 - Teaching Assistantship
Credits: 2
A) Physical Education Pedagogy; B) Exercise Leader; C) Outdoor Education; D) Science Labs; E) Cardiac Rehabilitation; F) Coaching. Students serve as teaching teaching assistants in assigned class activities. Assignments to be made by the class instructor may include teaching assistants' and administrative duties. May be repeated barring duplication of subject.
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): KIN 693, SPST 693
Grade Mode: Credit/Fail Grading

SML 696 - Independent Study
Credits: 2-4
An advanced, individual scholarly project under the direct supervision of a faculty member.
Equivalent(s): KIN 696, SPST 696
Grade Mode: Letter Grading

SML 696W - Independent Study
Credits: 2-4
An advanced writing-intensive, individual scholarly project under the direct supervision of a faculty member. Student and Faculty advisor will prepare a written proposal that outlines: questions to be pursued, methods of investigation, students qualifications to conduct the research, nature of finished written product (e.g. case study, position paper, extended lab report). Proposal must be approved by major faculty and dept. chair prior to students registration for SML 696W. All SML 696W projects must include Some forms of informal, ungraded writing such as a journal, reading summaries, draft chapters, or invention activities. Regular writing interaction between student and faculty adviser (i.e. at least weekly or biweekly), to include written feedback from the adviser. A finished product that is polished via revision. Faculty sponsors and students should consult the resources and guidelines of the UNH Writing Program.
Attributes: Writing Intensive Course
Equivalent(s): KIN 696W, SPST 696W
Grade Mode: Letter Grading

SML 699H - Honors Project
Credits: 4
Project first involves tutorial sessions to introduce the student to the experimental design, after which a research question is developed. After an appropriate literature review, the student collects and analyzes data, forms conclusions, and prepares a written report on the findings.
Attributes: Honors course
Equivalent(s): KIN 699H, SPST 699H
Grade Mode: Letter Grading

SML 738 - Sport Finance
Credits: 4
This course examines the financial tools that sport managers use to run their sport businesses. Therefore it explores traditional and innovative methods of revenue acquisition and financial management in sports organizations, the financial business structure of sports organizations, and the financial planning and forecasting processes that make organizations effective. Various other aspects of finance are discussed as they relate to sport organizations, including the tie value of money, capital structuring, stocks, inventory management, and taxation.
Equivalent(s): SPST 738
Grade Mode: Letter Grading

SML 740 - Athletic Administration
Credits: 4
Introduces basic management components and processes used in the successful administration of school and college athletic programs. Topics include planning, organizing, and managing sports programs, personnel, and policies; game scheduling; finances and facilities; equipment and event management; student support services; and key legal issues.
Equivalent(s): KIN 740, SPST 740
Grade Mode: Letter Grading

SML 741W - Social Issues in Contemporary Sports
Credits: 4
Investigation of interrelationships among sport, culture, and society in an attempt to understand the role and function of sport in contemporary society. Overview of selected socio-cultural factors that influence and result from participation in sports.
Attributes: Writing Intensive Course
Equivalent(s): KIN 741, SML 741, SPST 741
Grade Mode: Letter Grading

SML 761 - Career Development in Sport Management and Leadership
Credits: 4
Career Development in Sport Management & Leadership is the capstone course for majors in Sport Management & Leadership. A Capstone, by definition, is "a stone that forms the top of a wall or building … a final touch, a crowning achievement, a culmination." The capstone experience is designed to bring reflection and focus to the student's experiences at UNH. This course builds upon and extends the knowledge developed in prior required and elective courses, while tying in previous and current readings and discussions into the student's future in the sport industry. In addition, all students will develop several skills in the areas of professional writing, public presentation, and action-based research. Throughout the course, students will work individually and in groups. Prior to taking this course 150 Hours of documented sport related experience is required.
Equivalent(s): KIN 761, SPST 761
Grade Mode: Letter Grading

SML 764 - Advanced Sport Marketing
Credits: 4
An advanced course covering sport marketing, which includes a review of key sport marketing terms/concepts, in-depth experience writing s a sport marketer, and practical experience acting as a sport marketer. This course will instruct students n how to complete all aspects of an in-depth marketing plan. This is an undergraduate/graduate dual student course.
Prerequisite(s): (SPST 564 with a minimum grade of D- or SML 564 with a minimum grade of D- or ADMN 585 with a minimum grade of D-).
Equivalent(s): KIN 764, SPST 764
Grade Mode: Letter Grading

SML 765 - Advanced Topics in Coaching
Credits: 4
This course goes beyond the basic principles of coaching and addresses advanced topics in coaching (talent identification, talent development) from both the science and the art of coaching technique and strategies. This course is structured as an upper division course in Sport Studies. Content includes topics related to the development of the field of coaching. The class makes extensive use of case studies and analysis of practical coaching situations for the betterment of coach development. This course combines lecture, small group discussion and practical application of material.
Prerequisite(s): (SML 565 with a minimum grade of D- or SPST 565 with a minimum grade of D- or KIN 565 with a minimum grade of D-).
Equivalent(s): KIN 765, SPST 765
Grade Mode: Letter Grading

SML 770 - Sport Analytics
Credits: 4
An introduction to the concepts and practice of sports analytics. Students learn core analytical skills—visualization, exploratory analysis, correlation, probability, and entry-level predictive modeling—to answer real questions in both sport performance and sport business contexts. Emphasis is placed on framing problems, interpreting results responsibly, and presenting insights in decision-focused formats (brief reports, visuals, and dashboards).
Prerequisite(s): PSYC 402 with a minimum grade of C or SOC 402 with a minimum grade of C or ADMN 510 with a minimum grade of C or HMP 540 with a minimum grade of C or MATH 439 with a minimum grade of C or MATH 539 with a minimum grade of C or BIOL 528 with a minimum grade of C.
Grade Mode: Letter Grading

SML 780 - Psychological Factors in Sport
Credits: 4
Factors of outstanding athletic achievement; psychological variables in competition; the actions and interactions of sport, spectator, and athlete. Special attention directed to strategies for coaches, teachers, and athletic trainers to utilize sport psychology in their professional practice.
Prerequisite(s): PSYC 401 with a minimum grade of D-.
Equivalent(s): KIN 780, SPST 780
Grade Mode: Letter Grading

SML 798 - Special Topics
Credits: 1-4
New or specialized courses not normally covered in regular course offerings. Special fee on some sections.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): KIN 798, SPST 798
Grade Mode: Letter Grading
Special Fee: Yes

Supply Chain Management (SC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SC 671 - Supply Chain Analytics
Credits: 4
The course focuses on the quantitative side of Supply Chain Management (SCM) by applying both Descriptive and Prescriptive Analytics to SCM business scenarios. In Descriptive Analytics, students learn to use the principles of data visualization, data cleanup and wrangling, advanced data analysis and visualization tools, and dashboard design to develop and communicate Supply Chain Performance Metrics. In Prescriptive Analytics, students learn how to use advanced spreadsheet modeling/programming, optimization techniques, and sensitivity analyses to model, analyze, and optimize Supply Chain Networks.
Prerequisite(s): ADMN 410 with a minimum grade of C- and ADMN 510 with a minimum grade of C-.
Mutual Exclusion: No credit for students who have taken DS 671.
Grade Mode: Letter Grading

SC 680 - Global Supply Chain Management
Credits: 4
Global Supply Chain Management is a required course in the Supply Chain Management Option offered by the Decision Sciences Department at the Peter T. Paul College of Business and Economics. In this course students will explore various aspects of today's global supply chains as we cover five integrated learning modules: (1) Networks, Technology & People. (2) Supply & Demand Planning. (3) Sourcing & Supplier Management. (4) Operations & Logistics. (5) Margin Optimization & Customer Management.
Grade Mode: Letter Grading

SC 770W - Supply Chain Management External Experience
Credits: 4-8
This course is a credit-bearing, experiential learning course which may be taken as an alternative to SC 775 (SCM Team Capstone) by senior students in the Supply Chain Management (SCM) option. In this course, students engage in a semester-long, paid co-op experience working in a supply chain-related role within an external organization. Students apply SCM concepts and tools in a professional setting, gaining firsthand exposure to industry practices, challenges, and workflows. The experience is supported by academic deliverables that encourage reflection, integration of theory with practice, and professional development. A faculty advisor oversees the academic component, coordinates with the employer, and evaluates student performance.
Attributes: Writing Intensive Course
Equivalent(s): SC 775
Grade Mode: Letter Grading

SC 775 - Supply Chain Management Project Experience
Credits: 4
The Supply Chain Management Project Experience (DS 776) course is a required course in the undergraduate Supply Chain Management (SCM) option. In this course, students will work in groups of four (adjusted as needed based on course size and projects) on projects identified by sponsoring organizations. Students will actively engage in projects in the supply chain management space to deliver value to a real-world client. Project activities may include, but not be limited to, strategic sourcing analysis, logistics network optimization, new product launch strategy, inventory analysis, supplier sustainability audits, product model and pricing rationalization, etc. Students will participate in meetings and discussions with clients and project team members including project managers. In addition, students will work closely with a faculty member who will help them integrate the conceptual frameworks and SCM tools learned at Paul College with the challenges of their real-world experience.
Attributes: Writing Intensive Course
Prerequisite(s): SC 680 (may be taken concurrently) with a minimum grade of C-.
Equivalent(s): SC 770W
Grade Mode: Letter Grading

Supply Chain Management (SCM) CPSO

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SCM 570 - Supply Chain Purchasing Management
Credits: 4
In this course, students will learn how purchasing and supply management have become increasingly visible in a world where supply is a major determinant of corporate survival and success. Supply chain performance and influences will be examined as they are not only operational and financial risks but also reputational risk. Extending the supply chain globally into emerging regions places new responsibilities on the supplier and supply, not only to monitor environmental, social, political, and security concerns, but also to influence them. Thus, students will develop a more in-depth understanding of the job of the supply manager of today as they go beyond the scope of supply chain efficiency and value for money spent to search for competitive advantage in the supply chain.
Prerequisite(s): MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-.
Equivalent(s): SCM 510G
Grade Mode: Letter Grading

SCM 610 - Supply Chain Management
Credits: 4
This course explores the management and flow of materials in a typical enterprise supply chain. Students examine a complete overview of material flow, from internal and external suppliers, to and from the enterprise. Topics may include basic elements of the supply chain, just-in-time (JIT), total quality management (TQM), enterprise resource planning (ERP), demand planning, and capacity management.
Prerequisite(s): (MGMT 410 with a minimum grade of D- or MGMT 500G with a minimum grade of D-) and (CMPL 402 with a minimum grade of D- or CMPL 502G with a minimum grade of D- or MGMT 502G with a minimum grade of D-) and (MTH 402 with a minimum grade of D- or MATH 502G with a minimum grade of D-).
Equivalent(s): MGMT 610G, SCM 610G
Grade Mode: Letter Grading

SCM 715 - Logistics Management
Credits: 4
Logistics is planning and managing the movement of goods along the supply chain. This course provides students opportunity to identify and apply logistical and advanced managerial terms and theories. Designing effective development and management of the supply chain network is an invaluable source of sustainable, competitive advantage in today's turbulent global marketplace. In the contemporary scenario, demand is difficult to predict and the supply chain needs to be more flexible and customer-focused.
Prerequisite(s): SCM 610 with a minimum grade of D- or SCM 610G with a minimum grade of D-.
Equivalent(s): SCM 615G
Grade Mode: Letter Grading

Sustainability (SUST)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

SUST 401 - Exploring Sustainability
Credits: 4
How can we ensure dignity and wellbeing for all people, now and in the future, while protecting the earth's life supporting systems? We'll explore answers to this question through the transdisciplinary science, philosophy, and practice of sustainability. You'll develop systems thinking skills to analyze the environmental, social, and economic aspects of complex, interrelated challenges like climate change, global inequality, hunger, and biodiversity loss. Through active discussions, hands-on projects, and examples from UNH and our surrounding community, you'll learn about the many ways we can take action to create a more sustainable world.
Attributes: Environment,TechSociety(Disc)
Equivalent(s): NR 437, SUST 401H
Grade Mode: Letter Grading

SUST 401H - Honors/Exploring Sustainability
Credits: 4
How can we ensure dignity and wellbeing for all people, now and in the future, while protecting the earth's life supporting systems? We'll explore answers to this question through the transdisciplinary science, philosophy, and practice of sustainability. You'll develop systems thinking skills to analyze the environmental, social, and economic aspects of complex, interrelated challenges like climate change, global inequality, hunger, and biodiversity loss. Through active discussions, hands-on projects, and examples from UNH and our surrounding community, you'll learn about the many ways we can take action to create a more sustainable world.
Attributes: Environment,TechSociety(Disc); Honors course
Equivalent(s): NR 437, SUST 401
Grade Mode: Letter Grading

SUST 501 - Sustainability in Action
Credits: 4
This course explores what sustainability action entails from academic and practitioner perspectives. One of the goals of the course is to encourage strategic thinking and leadership development. We look at the interdependent nature of social and ecological challenges, consider effects of paradigms, mindsets, and power dynamics, and explore sustainability tools including systems thinking, inter-and transdisciplinary approaches, sustainability leadership strategies, effective messaging and communication, creating shared value (CSV), and stakeholder theory and analysis. We apply these tools by brainstorming viable sustainability solutions for business, non-profit, government, educational, or other organizations and provide current and local context for the material we cover.
Attributes: Writing Intensive Course
Prerequisite(s): SUST 401 with a minimum grade of D- or SUST 401H with a minimum grade of D-.
Grade Mode: Letter Grading

SUST 600 - Sustainability Independent Study
Credits: 1-4
SUST 600 will provide an independent study to students who are interested in studying of a topic in sustainability in depth. Due to the highly personalized nature of SUST 600, the specific readings, activities and assignments will vary based on student interests and disciplinary backgrounds. At a minimum, students will be guided in how to prepare a project proposal, place their work within the current literature on the topic, and complete a final project.
Prerequisite(s): SUST 401 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

SUST 605 - Sustainability Internship
Credits: 1-4
This course will provide credit for practical work or a project experience in sustainability. The purpose of the course is to gain practical experience working in a sustainability field while simultaneously achieving specific learning goals pre-identified by the student and faculty mentor.
Prerequisite(s): SUST 401 with a minimum grade of D-.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

SUST 750 - Sustainability Capstone
Credits: 4
The Sustainability Capstone is the culminating experience for students in the Sustainability Dual Major (SDM). The overall format of the course is to: 1) synthesize learning from other core and elective courses taken for the SDM and 2) work in groups to apply knowledge to a community-based, action-research project that addresses a specific sustainability issue at UNH or in the broader community. All groups present their work at UNH's Undergraduate Research Conference, submit a research paper, and complete other deliverables as needed to meet their project goals. Students will develop competence in community-based action-research methodologies and professional skills in facilitative leadership, collaborative project management and writing, community engagement, and equity assessments. Students will also create an online professional portfolio that highlights their sustainability experience and perspectives.
Attributes: Writing Intensive Course
Prerequisite(s): SUST 401 with a minimum grade of C- and SUST 501 with a minimum grade of C-.
Grade Mode: Letter Grading

Sustainable Agriculture & Food Systems (SAFS)

Courses previously under the SAFS subject prefix are now under the following new subject prefix:

Agriculture & Food Systems (AGFS) (p. 759)

Technology (TECH)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

TECH 400 - Introduction to CEPS Programs
Credits: 1
An overview of programs offered by the College of Engineering and Physical Sciences with an emphasis on skills needed to be successful academically, career opportunities and professional development. Required course of all undeclared majors in CEPS.
Grade Mode: Credit/Fail Grading

TECH 401 - Scientific Research Exploration
Credits: 2
This course introduces incoming freshmen to the scientific research process via a hands-on approach, which includes case studies, group work, and a two-week immersion experience under the guidance of the College of Engineering and Physical Sciences (CEPS) faculty. Course readings, discussions, and active participation in local research will facilitate the student's exploration of experimental design, hypothesis testing, data collection and analysis, interpretation of results, and effective communication of research findings. In the context of a group research project, students begin thinking like scientists, as well as strengthening their math, writing, an oral communication skills.
Grade Mode: Credit/Fail Grading

TECH 402 - Introduction to CEPS Career Exploration
Credits: 1
Although not a pre-requisite -this course will build on TECH 400's academic exploration and guide CEPS students as they identify ways to self-reflect and build experience to become well-rounded applicants for experiential learning opportunities (internships and research), graduate school, and their future careers. An emphasis will be placed on identifying ways to harness transferable skills through hands-on experiences beyond the classroom (jobs, volunteer work, clubs and orgs) applicable to the student's field(s) of interest.
Grade Mode: Credit/Fail Grading

TECH 411 - Innovation Scholars I
Credits: 2
A research driven introduction to the university experience. Science, mathematical, and engineering principles will be applied within a cohort research experience for first year students. Under the direction of a faculty mentor(s), student teams will be guided through a year-long research experience culminating in a presentation of research results at the Undergraduate Research Conference, or equivalent activity.
Grade Mode: Credit/Fail Grading

TECH 412 - Innovation Scholars II
Credits: 2
A research driven introduction to the university experience. Science, mathematical, and engineering principles will be applied within a cohort research experience for first year students. Under the direction of a faculty mentor(s), student teams will be guided through a year-long research experience culminating in a presentation of research results at the Undergraduate Research Conference, or equivalent activity.
Attributes: Inquiry (Discovery)
Prerequisite(s): TECH 411 with a minimum grade of D-.
Grade Mode: Credit/Fail Grading

TECH 602 - Machine Shop Training
Credits: 1
In this course, the operation of the basic metal-cutting machine tools (e.g., engine lathe, milling machine, drill press, band saw, cut-off saw, etc.) are demonstrated. The students receive introductory training on the safe operation of these machines as well as on safe practices in the machine shop. Two small projects are completed to demonstrate basic machine shop abilities by the end of the course. Students must successfully complete an online shop safety quiz prior to the first day of the course. Offered spring and fall semesters only.
Equivalent(s): TECH 602A
Grade Mode: Credit/Fail Grading
Special Fee: Yes

TECH 750 - Intellectual Asset Management for Engineers and Scientists
Credits: 4
This course provides an introduction to the most important topic in the 21 century--intellectual assets. Students will receive an overview in practical, real-world aspects of managing intellectual assets (copyright, patents, trademarks, trade secrets, etc.). Students taking this course will be exposed to lectures, guest presentations, and case studies aimed at increasing their understanding of intellectual property strategies and related legal issues; technology assessment; technology valuation; licensing issues, strategies and negotiation techniques; business planning and start-up company development; and strategies for attracting investment for new ideas. The instructors and guest speakers for the course are involved in managing, protecting, investing in, or commercializing intellectual property assets in real world settings such as university technology transfer offices, patent law firms, venture capital firms, start-up companies, and related settings.
Equivalent(s): UMST 750
Grade Mode: Letter Grading

TECH 780 - Intellectual Property Law for Engineers & Scientists
Credits: 3
This course will cover the major doctrines of trade secrets, patents, copyrights, and trademarks, including what kinds of information qualify for protection, what must be done to obtain that protection, what rights owners and others have to use the information, and the underlying policy choices made by legislators and courts.
Grade Mode: Letter Grading

TECH 797 - Undergraduate Ocean Research Project
Credits: 2
Students work as members of interdisciplinary project teams on contemporary ocean-related problems under the guidance of a faculty adviser. Student team defines problem, prepares a budget, conducts literature surveys, engages in dialogue with experts in the community, deals with vendors, designs, and builds a working engineering model, gathers and analyzes scientific data or conducts a comprehensive study, makes interim reports, and defends the results before a jury of experts. A yearlong effort: 2 credits each semester, 4 credits total, an IA (continuous course) grade given at the end of the first semester.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to 1 time.
Equivalent(s): TECH 697
Grade Mode: Letter Grading

Theatre & Dance (THDA)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

THDA 401 - New Student Seminar
Credits: 1
This course is an introduction to being a theatre and dance major. Students will examine academic standards expected in our department as well as management skills essential for success in balancing rehearsal and practicum schedules with academic responsibilities for all classes. This course is focused on helping majors understand expectations of being a Theatre and Dance major along with ways to cope with the stress.
Grade Mode: Credit/Fail Grading

THDA 435 - Introduction to Theatre
Credits: 4
Introduces all aspects of theatrical production: play writing, acting, directing, design, technical theatre and construction, and theatre management. Cultural and social context of theatre in our time and through the ages. Introduces major classical and modern types of theatre. Selected plays are read and discussed, and attendance at theatrical production is required.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

THDA 436 - History of Theatre I
Credits: 4
The history of theatre and its drama is introduced through close study of the world's greatest plays from the Greeks through the end of the 17th century -- How these plays were performed then, how they are performed now, their political, social, and cultural urgencies.
Attributes: FinePerformingArts(Discovery); Writing Intensive Course
Equivalent(s): THDA 436H
Grade Mode: Letter Grading

THDA 438 - History of Theatre II
Credits: 4
The history of theatre and its drama is introduced through close study of the world's greatest plays of the 19th, 20th, and 21st centuries -- How these plays were performed then, how they are performed now, their political, social and cultural urgencies.
Attributes: FinePerformingArts(Discovery); Writing Intensive Course
Equivalent(s): THDA 438H
Grade Mode: Letter Grading

THDA 439 - In Bed with the Bard: Shakespearean Seduction from Romeo and Juliet to Leonardo and Claire
Credits: 4
Introduces the imaginative process by which actors and directors bring Shakespeare's plays to life on the stage. Detailed study of eight plays.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

THDA 441 - Exploring Musical Theatre
Credits: 4
This is an introductory course designed to enhance the student's enjoyment and understanding of musical theatre. Course content and internet exploration as well as play attendance are designed to acquaint students with and nurture an appreciation for musical theatre. This course is intended for introductory students of all majors who are interested in studying musical theatre elements, styles, and significance.
Attributes: FinePerformingArts(Discovery)
Equivalent(s): THDA 440
Grade Mode: Letter Grading
Special Fee: Yes

THDA 442 - Introduction to the Art of Acting
Credits: 4
Designed for non-THDA major students interested in the art of acting. Students broaden and deepen their own creativity, gain a deeper understanding of human behavior and interaction, and strengthen analytical skills through class work and projects. Focuses on the basic skills of acting: the ability to effectively communicate, to gain access to the full spectrum of human emotions, and increase spontaneity. Important innovators and theorists in the field of theatre and acting are covered, such as Sanford Meisner, Constantine Stanislavski, Bertolt Brecht, Jerzy Grotowsky, Agusto Boal, and Jacques Lacoq. Additional topics include contemporary plays and playwrights, an historical perspective of the art of acting, and the current state of live theatrical performance. Theatre majors not allowed.
Attributes: FinePerformingArts(Discovery)
Equivalent(s): THDA 551
Grade Mode: Letter Grading
Special Fee: Yes

THDA 444B - Famous Dancers of the 20th Century
Credits: 4
The purpose of this course is to provide an introduction to the dancers of the twentieth century whose contributions to the art form have made dance an important cultural necessity. This includes examining how their style of dance and unique personalities has had a major influence on our perceptions of dance and how they have had an effect on society.
Attributes: FinePerformingArts(Discovery); Inquiry (Discovery); Writing Intensive Course
Grade Mode: Letter Grading

THDA 450 - History of Musical Theatre in America
Credits: 4
Study of the development of the musical and its relationship to American social history.
Equivalent(s): THDA 440
Grade Mode: Letter Grading
Special Fee: Yes

THDA 455 - Musicianship and Beginning Vocal Techniques for Musical Theatre
Credits: 2
This course is a combination course designed to help musical theatre students develop the appropriate musicianship skills as well as beginning vocal techniques. Musicianship skills include melodic and rhythmic sight reading, harmony reading and singing, basic piano skills, as well as key signature and interval recognition. Beginning vocal techniques include breath management, strengthening vocal fold closure, releasing tension and creating space in the acoustic chamber (throat and mouth). These skills will help musical theater students develop the ability to overlap strong vocal work with strong musicianship specifically for industry standard auditions and performances in Musical Theatre.
Grade Mode: Letter Grading

THDA 458 - Costume Construction
Credits: 4
Study and development of costuming techniques, including hand and machine sewing, pattern drafting, alterations, and fabric manipulation. Emphasis on demonstrated understanding.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 459 - Stagecraft
Credits: 0 or 4
Elements of play production: basic building components, tools, and materials for producing the scenery; equipment and shop layouts supporting all of the areas of the set, lighting, and costume designs; and consideration of various stage spaces and theatrical venues. Practical application on University theatre productions. Lab.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

THDA 460 - Elements of Design
Credits: 4
Course is designed for students who are interested in theatrical design elements including scenery, costume, lighting and sound. Class encompasses lecture, discussion, presentation and studio (work in class) formats. Critique and discussion are essential to the creative thinking that a designer needs to have. Throughout the course, each student is expected to complete projects that incorporate the design elements they have studied.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 462 - Ballet I
Credits: 4
Introductory lecture and dance technique course focusing on the fundamentals of ballet technique and the historical development of ballet from the Renaissance to modern times. This ballet class will improve strength, flexibility, coordination, agility, endurance, and musicality while incorporating an appreciation for artistry. No dance experience required, only willingness to develop at your own pace. Open to both majors and non-majors.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

THDA 463 - Theatre Dance I
Credits: 4
Introductory lecture and dance technique course focusing on how technology, industrialization and popular culture impact the art by discussing dancers, choreographers, films and musicals of the 20th century. Jazz and tap class will improve strength, flexibility, coordination, and musicality. No Dance experience required, only willingness to develop at your own pace. Students with prior experience are expected to register for THDA 563 or THDA 663. Instructor determines appropriate level. Class open to both majors and non-majors.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

THDA 464 - Ballet Cross-Training
Credits: 1
Traditional ballet exercises will be modified to focus on repetition and body mechanics to improve athletic skills through dance. This ballet class will help students further develop strength, coordination, speed, agility, flexibility, fluidity, balance, efficiency of movement, and mental focus. Particular emphasis will be given to psychomotor skill development through challenges that require applying unfamiliar ballet vocabulary while moving to music. No dance experience required, only willingness to develop at your own pace in a fun, judgment-free environment.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

THDA 475 - Stage Makeup
Credits: 2
Fundamentals of juvenile, old age, character, and special stage makeup techniques.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 487 - History of Dance
Credits: 4
This course will be a study of dance from prehistory to the present. Through an interactive approach students will gain methods to perceive, create and respond to the history of dance through integrated arts and technology. Activities both in and out of the classroom will aid in the understanding of dance and how it has evolved throughout history both socially and as a means of entertainment. This course will also examine how dance has influenced or collaborated with other art forms.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading

THDA 500 - Musical Theatre Voice I
Credits: 0 or 1
This course provides students with a foundation in healthy, relaxed, and dynamic singing of primarily musical theatre repertoire. In addition to expanding the student's knowledge of and ability to sing various styles of musical theatre repertoire, this course provides a venue to explore and develop analytical skills relating to character and script.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

THDA 522 - Storytelling, Story Theatre, and Involvement Dramatics
Credits: 4
This course actively explores storytelling techniques based on individual needs. An examination of story theatre and involvement styles leads to practical experience in individual performances. Participants will actively develop performance techniques that reflect a variety of styles and approaches for storytelling. We will examine the historical significance of storytelling in Eastern and Western civilizations and develop a perspective on its role in culture and religion. Applications for both educational and entertainment purposes will be explored through acting and vocal techniques, games, media, felt board, and puppetry. This course will include an examination of story theatre and involvement styles and the development of the ensemble for performance. The projects will include individual performances and group collaboration of selected stories appropriate for a wide range of audiences. The final project will reflect the participant's individual needs and utilize storytelling techniques developed in the course.
Attributes: FinePerformingArts(Discovery)
Equivalent(s): THDA 622
Grade Mode: Letter Grading
Special Fee: Yes

THDA 531 - The London Experience: Discovery
Credits: 4
Learn about one of the greatest cities in the world during this 10-day trip to London. This Discovery class begins as a two-week, on-line course and then packs in a busy schedule visiting amazing sights and taking in some of the best theatre in the English speaking world. The course offers an insight into the history, politics, society and culture of London through the lens of art, architecture, music, and of course, theatre.
Co-requisite: INCO 589
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

THDA 532 - The London Experience
Credits: 2
Exploration of the culture and history of London while enhancing study of live theatre prior to active study in the country. IA (continuous grading).
Co-requisite: INCO 589
Repeat Rule: May be repeated for a maximum of 4 credits.
Equivalent(s): THDA 592C
Grade Mode: Letter Grading
Special Fee: Yes

THDA 541 - Arts Administration and Entrepreneurship
Credits: 4
This course will explore multiple facets of the business of running an arts-based organization. The course will also examine business-related issues relevant to individuals seeking to build a career in the arts. The class will provide an overview of the essential knowledge needed for effective arts management and to cultivate the skillset needed to develop, fund, promote and deliver arts-based projects.
Attributes: Inquiry (Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

THDA 546 - Costume Design for the Theatre
Credits: 4
How to design costumes for the theatre, not figure drawing, although drawing techniques are taught. Script analysis and research and presentational techniques for costume design explored and implemented.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 548 - Stage Lighting Design and Execution
Credits: 4
This class is designed for students who are interested in theatrical lighting design. The class meets 3 hours per week. It is a project-based course taught in various formats including lectures, hands-on practices, class discussions, and presentations. The class will help students develop the skills for lighting design and creative thinking that are essential for a critical thinker.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

THDA 549 - Vectorworks Computer-Aided Design Drafting for the Theatre
Credits: 2
This course will help students develop essential drafting skills used to present design ideas, technical solutions, and communication in productions. Drafting is a form of visual presentation that brings the design ideas to realization. Throughout the semester, students will learn about the basic graphic standard in the industry, gain proficiency in VectorWorks software, and develop a clear and accurate presentation for their designs.
Grade Mode: Letter Grading

THDA 551 - Acting I
Credits: 4
Development of fundamental vocal and physical stage techniques for actors and directors through exercises, improvisation and theatre games.
Attributes: Inquiry (Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

THDA 552 - Acting II
Credits: 4
Focuses on strengthening the actor's ability to achieve a higher level of truth, presence, and spontaneity on stage. Building on the approach devised by Sanford Meisner, this highly intensive class creates a bridge to connect these developing skills to various forms of text.
Prerequisite(s): THDA 551 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 554 - Stage Combat
Credits: 4
This course actively explores stage combat techniques for unarmed combat as well as basic rapier swordplay. Students are expected to prepare hand-to-hand acting projects as well as a final rapier fight project which demonstrates proper stage combat techniques learned during the semester.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 555 - Acting The Song
Credits: 4
Foundations of solo musical theatre performance, with a special focus on Acting the Song. Students will review beginner acting techniques and transfer their work from the realm of the monologue into the realm of the musical theatre solo assessed through solo performances and written assignments.
Grade Mode: Letter Grading

THDA 562 - Ballet II
Credits: 2
This dance technique class is taught at an intermediate level and is an extension of Ballet I with a focus on developing ballet vocabulary and artistry. Open to both majors and non-majors.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

THDA 563 - Theatre Dance II
Credits: 2
This dance technique class is an extension of THDA 463. Students will become versatile in a variety of dance styles, including contemporary and musical theatre style jazz and tap dance. Technical execution, artistry and improvisation will be explored. Open to both majors and non-majors.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 564 - Compocinema
Credits: 4
Compocinema examines dance/movement as an interdisciplinary form that integrates the human body, digital video camera, the computer program, and site-specific and/or collaborative formats. Emphasizing conceptual and practical approaches, students (individually and in groups) will take turns developing and performing movement as well as planning, designing, shooting, editing, observing, describing, analyzing, and revising video of dance/movement as artistic expression.
Grade Mode: Letter Grading

THDA 565 - Aerial Dance I
Credits: 2
This class focuses on beginning aerial dance language and skills as well as body conditioning. Apparatuses including fabric, trapeze and lyra are introduced.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

THDA 570 - Movement & Vocal Production
Credits: 4
Expansion of the student's body-voice awareness, utilizing basic theories and lessons of Lessac Kinesensics and other somatic voice and body practices. Students will build breath-body connection and capacity, expand resonance and articulation, explore body alignment and expressiveness to build a foundation for a healthy and dynamic body-voice for stage and screen performance.
Prerequisite(s): THDA 551 with a minimum grade of D-.
Equivalent(s): THDA 470
Grade Mode: Letter Grading
Special Fee: Yes

THDA 576 - Pointe
Credits: 2
This class is taught at an intermediate level focusing on developing pointe technique and artistry. Classical variations are incorporated to study the history of ballet through practical application. 1-2 years of pointe technique required. If interested in beginning the study of pointe technique, contact the instructor. Open to both majors and non-majors.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

THDA 583 - Introduction to Puppetry
Credits: 4
Introduces the art of puppetry for general appreciation, entertainment, application in the classroom, and as a therapeutic tool. Emphasis on constructing a variety of puppets (e.g., hand, rod, shadow, and scarf) and adapting literary sources for scripts and performance.
Attributes: FinePerformingArts(Discovery)
Grade Mode: Letter Grading
Special Fee: Yes

THDA 589 - Practicum
Credits: 1
The practicum ensures a breadth of experience in the major, including sets, costumes, lighting, props, box office, marketing, and performing. Students must register for practicum every semester. They are notified of their practicum assignment at the beginning of each semester.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): THDA 689
Grade Mode: Credit/Fail Grading

THDA 600 - Musical Theatre Voice II
Credits: 0 or 1
This course is a continuation of THDA 500: Musical Theatre Voice I. Students build on the groundwork in vocal technique, analysis, and performance established in Musical Theatre Voice I and continue to explore and develop these skills.
Grade Mode: Letter Grading

THDA 624 - Theatre for Young Audiences
Credits: 4
Introduces coaching and directing techniques for classical and contemporary acting styles in theatre for young audiences. Historical contents leads into practical exploration of actor training and coaching , production and design, choreography, and business management for theatre and for youth programs. Students develop teaching strategies for young performers and participate in a culminating project.
Equivalent(s): THDA 624A, THDA 624B, THEA 624A, THEA 624B
Grade Mode: Letter Grading
Special Fee: Yes

THDA 632 - Interpretation of Shakespeare in Theatre
Credits: 4
Increases understanding of Shakespeare's language and action, and improves ability to speak his verse and prose with clarity and verve. Students achieve insights into Shakespeare's plays through the medium of performance. Weekly oral and written assignments.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 633 - Dance Composition
Credits: 4
Practical, developmental approach to process of creating dances.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 640W - Playwriting
Credits: 4
To illuminate and guide each student through the art and craft of writing for performance. This course explores the fundamental principles needed to build a realistic play that is intended to be produced upon the stage. Though the course is built around the construction of plays, the principles, writing exercises, readings, and other assignments serve as a solid base for any form of dialogue driven writing.
Attributes: Writing Intensive Course
Equivalent(s): THDA 540, THDA 540W, THDA 750
Grade Mode: Letter Grading
Special Fee: Yes

THDA 641 - Stage Management
Credits: 4
Introduces to the concepts and skills needed for stage management. Stage managers perform a central role in the theatrical production, coordinating artistic and technical elements. They need a thorough understanding of the script, strong management skills, and a solid background in all aspects of the theatre. Prepares students to function as a stage manager in productions at any theatre.
Equivalent(s): THDA 592B
Grade Mode: Letter Grading
Special Fee: Yes

THDA 652 - Scene Design
Credits: 4
Scene design from script to finished design. Both aesthetic and practical viewpoints considered. Emphasis on presentational techniques: study of perspective and finished rendering.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 655 - Musical Theatre Scene Study
Credits: 4
Builds on and expands the techniques learned in Acting I and Musical Theatre Voice I, with a special emphasis on partner work and scene study.
Prerequisite(s): (THDA 442 with a minimum grade of D- or THDA 551 with a minimum grade of D-) and THDA 555 with a minimum grade of D-.
Grade Mode: Letter Grading

THDA 662 - Ballet III
Credits: 2
Advanced-level course in technique. Open to both majors and non-majors.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading

THDA 663 - Theatre Dance III
Credits: 2
This dance technique class is an extension of THDA 563. Students will become seasoned in contemporary jazz, musical theatre style jazz and tap dance. Technical execution, choreographic artistry and improvisation will be explored. Class open to both majors and non-majors.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 665 - Aerial DanceII
Credits: 2
The study of aerial arts including two and one point trapeze and fabric. Class open to both majors and non-majors.
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 668 - Aerial Dance Teacher Training
Credits: 2
Students who show mastery of aerial dance performance may receive permission to take Aerial Dance Teacher Training. This course will result in a certificate verifying students have completed a 75-hour training program focusing on the fundamental skills needed to safely teach Aerial Dance, including: Teaching aerial skills on a variety of apparatuses, safety practices, stretching methods, conditioning, physical preparation and injury prevention.
Prerequisite(s): THDA 565 with a minimum grade of D- and THDA 665 with a minimum grade of B-.
Grade Mode: Letter Grading

THDA 670 - Dialects
Credits: 4
Study and practice in basic dialect acquisition for performers.
Prerequisite(s): THDA 551 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 672 - Audition
Credits: 4
Business aspects of creating and maintaining a performance career, including resumes, photos, agents, casting directors, website building, networking, unions, trade publications, audition material, cold-reading, camera acting, and voice over.
Prerequisite(s): THDA 551 with a minimum grade of D-.
Grade Mode: Letter Grading

THDA 683 - Advanced Puppetry
Credits: 4
In-depth study of the theory and practice of puppetry for the advanced student. Students develop skills in manipulation and construction of selected puppet forms and apply these skills in performance. Examines historical perspectives and the application of puppetry in the classroom and as a therapeutic tool.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 700 - Musical Theatre Voice III
Credits: 0 or 1
This course is a continuation of THDA 600: Musical Theatre Voice II. Students continue to develop their skills of vocal technique, analysis, and performance established in Musical Theatre Voice II, while focusing these skills towards their application in auditioning for, and performing in, professional theatre.
Repeat Rule: May be repeated for a maximum of 3 credits.
Grade Mode: Letter Grading

THDA 721 - Arts Integration
Credits: 4
This course examines the value and practical application of incorporating the arts into non-arts educational settings. From the perspective of multiple intelligences and varied learning styles, students investigate how the arts can enhance teaching methodology by developing and implementing lesson plans for a variety of non-arts subject areas. Active theatre involvement is limited; the focus is on practicing teaching methods.
Attributes: Writing Intensive Course
Equivalent(s): THDA 621
Grade Mode: Letter Grading
Special Fee: Yes

THDA 727 - Methods of Teaching Theatre
Credits: 4
This course is the culminating experience for theatre education. The purpose is to provide practical information and skills that theatre teachers will use as source material for the classroom and to prepare for the education job search. Students will examine a variety of teaching models in order to articulate a personal teaching philosophy, write comprehensive semester curricula and course syllabi, and create an extracurricular program plan and philosophy.
Attributes: Writing Intensive Course
Equivalent(s): THDA 627
Grade Mode: Letter Grading
Special Fee: Yes

THDA 729 - Community Oriented Drama Programs
Credits: 1-4
Advanced practicum in designing, developing, and producing drama programs for the school and community. Includes audience analysis and marketing skills as well as adapting spaces, soliciting volunteers, and working with a limited budget.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 732 - Choreography
Credits: 4
Theoretical and practical consideration of the creative and aesthetic aspects of ballet, modern, and theatre dance.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 741 - Directing
Credits: 4
A process oriented approach to the art of stage directing. The course begins with an in-depth focus on script analysis. Students then develop their skills as the "master storyteller" through imagination, interpretation, communication, and style.
Prerequisite(s): THDA 551 with a minimum grade of D- and THDA 552 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 742 - Directing II
Credits: 4
In-depth study of the theory and practice of stage direction for the advanced student. Builds on 741, Directing. Students strengthen and expand their existing knowledge of the subject area. Exploration focuses on three areas of directorial communication: application to periods and styles, exploration of avant-garde theory, and directorial technique. Concludes with a major project mounted for public performance.
Prerequisite(s): THDA 741 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 755 - Musical Theatre Repertoire
Credits: 4
Students learn to integrate and expand on techniques in previous acting, musical theatre, and voice classes, with special emphasis given to audition techniques, repertoire expansion and specialization, and in-depth analysis of the business and personal requirements necessary to be a successful artist in the professional theatre.
Prerequisite(s): (THDA 442 with a minimum grade of D- or THDA 551 with a minimum grade of D-) and THDA 555 with a minimum grade of D-.
Grade Mode: Letter Grading

THDA 758 - Acting III
Credits: 4
Applies the principles and techniques acquired by students in THDA 551 and THDA 552 to various genres, such as epic and absurdist, and to mediums such as television and film. Special attention is given to characterization beyond the student's standard range and the development of the actor as a creative artist, using the techniques of such methodologists as Lacoq, Laban, and Grotowski.
Prerequisite(s): THDA 551 with a minimum grade of D- and THDA 552 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 759 - Acting: Period and Style
Credits: 4
Techniques of style analysis and period research. For the first time in the students' undergraduate actor training, students synthesize their basic actor training with the heightened language and archetypal characterization inherent in the classical theatre of the ancient Greeks, the Commedia dell' Arte, the Renaissance, the Neoclassical period, and the Restoration period.
Prerequisite(s): THDA 551 with a minimum grade of D- and THDA 552 with a minimum grade of D- and (THDA 436 with a minimum grade of D- or THDA 438 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

THDA 760 - Teacher Planning for Theatre
Credits: 4
Focuses on lesson and unit planning for the areas of high school theatre history, play analysis, and play writing. Students will practice various methods of teaching these areas of drama.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 765 - Aerial Dance III
Credits: 2
Aerial Dance III is an advanced-level course designed for experienced aerial dance students who have successfully completed Aerial Dance II (THDA 665) or equivalent training. This course deepens technical proficiency on multiple aerial apparatus while emphasizing choreographic development, ensemble creation, and performance artistry. Students will work on complex sequences, dynamic transitions, drops, and multi-apparatus work (including cube, triangle, rope, and triple trapeze), expand their rigging literacy, and collaborate to create large-scale group works. The semester culminates in an Aerial Dance Showcase in which Aerial III students are responsible for opening and closing multi-apparatus group pieces, and a solo or duet aerial work on an apparatus of their choice (approved by instructor).
Repeat Rule: May be repeated for a maximum of 16 credits.
Grade Mode: Letter Grading
Special Fee: Yes

THDA 786 - Dance Pedagogy
Credits: 4
Methods course that focuses on the art and science of teaching the movement forms of ballet, modern, jazz and tap. Designed to prepare students who are seeking dance certification with a M.Ed. or a M.A.T., or who wish to open their own studio. Provides background into the nature of teaching, standards that make up good teaching, awareness of National/State standards, and study and practice of lesson plans in K-12 school curricula or private studios.
Grade Mode: Letter Grading

THDA 791 - Internship in Theatre and Dance
Credits: 2-8
Fieldwork with a regional or touring theatre or with a theatre education program. This advanced-level internship allows the student to experience a professional theatre/theatre education setting prior to graduation. Normally supervised by a qualified theatre professional, with frequent consultation with a faculty sponsor. Written report required. May be part- or full-time with credits assigned accordingly.
Repeat Rule: May be repeated for a maximum of 12 credits.
Grade Mode: Letter Grading

THDA 795 - Independent Study
Credits: 1-8
Advanced individual study. Specific independent study opportunities are sometimes posted in the Theatre and Dance Department Office. Project, which includes a substantial piece of writing, must be developed with supervising instructor.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): THDA 795W
Grade Mode: Letter Grading

THDA 795W - Independent Study
Credits: 1-8
Advanced individual study. Specific independent study opportunities are sometimes posted in the Theatre and Dance Department Office. Project, which includes a substantial piece of writing, must be developed with supervising instructor.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): THDA 795
Grade Mode: Letter Grading

THDA 796 - Independent Study
Credits: 1-8
Advanced individual study. Specific independent study opportunities are sometimes posted in the Theatre and Dance Department Office. Project, which includes a substantial piece of writing, must be developed with supervising instructor.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): THDA 796W
Grade Mode: Letter Grading

THDA 798 - Senior Thesis
Credits: 2
Supervised research leading to the presentation of a major research paper.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

THDA 799 - Capstone Project
Credits: 2 or 4
This required course incorporates and tests the knowledge that majors have learned over their careers in the Department of Theatre and Dance. Capstone experiences are tailored to each student through conference with their adviser in their specific Theatre and Dance track.
Attributes: Writing Intensive Course
Equivalent(s): THDA 799H
Grade Mode: Letter Grading

THDA 799H - Honors/Capstone Project
Credits: 4
See description for THDA 799.
Attributes: Honors course; Writing Intensive Course
Equivalent(s): THDA 799
Grade Mode: Letter Grading

Tourism Planning & Development (TOUR)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

TOUR 400 - Introduction to Tourism
Credits: 4
Provides an informational foundation in tourism and gives a more extensive knowledge of the tourism industry. Examines historical perspectives, tourism organization, and supply and demand of the tourism industry. Discusses the dynamic and pluralistic nature of the tourism industry.
Equivalent(s): HMGT 401
Grade Mode: Letter Grading

TOUR 510 - Tourism and Global Understanding
Credits: 4
Introduces ways in which tourism can act as a vehicle to understanding foreign cultures. Responsible tourism, has the potential to help bridge cultural and psychological distances that separate people of different races, religions, and socio-economic classes. Through responsible tourism we can learn to appreciate, trust, and respect the human diversity that our world has to offer. Helps students gain an informed acquaintance with other cultures and customs, and to understand the central role of tourism in international and cross-cultural understanding.
Grade Mode: Letter Grading

TOUR 798 - Independent Study
Credits: 1-4
Special assignments in readings, investigations, field problems. May include teaching experience.
Equivalent(s): TOUR 798W
Grade Mode: Letter Grading

TSAS Social Science (SSCI)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

No courses are currently active in the course inventory for this subject prefix.

TSAS Thompson School Applied Science (TSAS)

No courses are currently active in the course inventory for this subject prefix.

TSAS 495 - Thompson School:Special Topics
Credits: 1-4
New or specialized courses not normally covered in regular course offerings. May involve one, two or more program areas within the Thompson School of Applied Science. Topics and prerequisites (if any) to be announced before registration. May include a lab.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): TSAS 295
Grade Mode: Letter Grading

UNHM Independent Study (UMIS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

UMIS 599 - Independent Study
Credits: 1-4
Independent study with the approval and sponsorship of UNHM faculty of material not covered in regular course offerings. Barring duplication of subject, may be repeated.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Letter Grading

UNHM Special Topics (UMST)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

UMST 401 - First Year Seminar
Credits: 2
This two-credit seminar is part of UNH Manchester's continued commitment to the success of first year students. The focus of this course is not on a specific academic subject or field of study; instead, the focus is on YOU – the student. This course is designed to help you transition into your first semester as a college student on the Manchester campus. Together we will learn how to incorporate health and well-being into our daily lives through the exploration of resiliency skill building, mindfulness practice, peer-to-peer discussions, and personal reflections.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

UMST 402 - Transfer Seminar
Credits: 1
The Transfer Seminar focuses on students' adjustment to being at UNH Manchester. By incorporating topics such as campus resources, financial literacy, internship and career planning, self-reflection, and information literacy, the goal of this course is to foster the development of skills or strategies that are both applicable and valuable across disciplines as well promoting personal success during and after college.
Grade Mode: Letter Grading

UMST 472 - Beyond Google: An Introduction to Information Literacy
Credits: 2
Beyond Google is a 2-credit introduction to the six frameworks of information literacy for high education created by the Association of College and Research Libraries. Students learn the critical thinking skills necessary to identify, evaluate, and use diverse information sources to meet varied information needs.
Grade Mode: Letter Grading

UMST 500 - Internship
Credits: 1-4
The UNHM internship places students in a variety of business and organizational settings under the direction of a faculty adviser and workplace supervisor. Students fulfill the obligations of the workplace internship plan, as well as complete individually-designed projects of academic merit under the direction of UNH faculty. Open to matriculated students with a 2.5 GPA or better. Students must receive approval of the UNHM internship coordinator.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

UMST 521 - Tutor Development
Credits: 3
This interdisciplinary course, team-taught by the Director and Assistant Director of the Learning Center, is intended to prepare undergraduates for working as peer tutors. Students will study theories of adult development, learn several approaches to tutoring in their discipline(s), and practice their tutoring and communication skills. Cannot be repeated.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading

UMST 572 - Knowledge in Action: Research in the Workplace
Credits: 2
This 2-credit course guides students toward critical thinking competencies and evaluative skills necessary for successful information-seeking strategies in workplace settings. By discovering and assessing a variety of career-specific information sources, students will explore how professional organizations develop questions to address problems of practice. Students will interrogate the contexts in which professionals create and disseminate knowledge; engage in fact-checking and other assessment activities; and address workplace issues through the effective use of relevant professional information sources.
Grade Mode: Letter Grading

UMST 582 - Internship and Career Planning Seminar
Credits: 1
This course is strongly encouraged for any student seeking internship and/or employment opportunities. Participants will research and evaluate opportunities related to their career interests, conduct informational interviews, create tailored resumes and cover letters, use LinkedIn as a networking and job search resource, and participate in employer-based resume reviews and mock interviews. This course is open to all students in all majors and is suited for students interning and/or seeking employment within the next six months. Letter grades are assigned. This course cannot be repeated for credit. Students who enrolled in UMST 599 Internship and Career Planning Seminar previously are not eligible to take this course for credit.
Grade Mode: Letter Grading

UMST 599 - Special Topics
Credits: 1-4
Occasional offerings dependent on availability and interest of faculty, barring duplication of subject, may be repeated for credit.
Repeat Rule: May be repeated up to unlimited times.
Grade Mode: Letter Grading

UMST 750 - Business Applications of Intellectual Property in Science and Engineering
Credits: 4
Students will receive an overview of practical, real-world aspects of managing and leveraging intellectual assets (copyrights, patents, trademarks, trade secrets, etc) in business. Students taking this course will be exposed to lectures, guest presentations, and case studies aimed at increasing their understanding of intellectual property strategies and related legal issues; technology assessment; technology valuation; commercialization issues, strategies, and negotiation techniques; business planning and start-up company development; and strategies for attracting investment for new ideas. Your instructor and guest speakers for the course are involved in managing, protecting, enabling, investing in, or commercializing intellectual property assets in real world settings such as university technology transfer offices, patent law firms, venture capital firms, start-up companies, incubators, accelerators, and related settings.
Equivalent(s): TECH 750
Grade Mode: Letter Grading

UMST 799 - Pre-Pharmacy Concurrent Enrollment
Credits: 0-20
Registration place-holder for students completing the fourth year of their B.A. Biology Program at Massachusetts College of Pharmacy and Health Studies in the Pre-Pharmacy articulation program.
Grade Mode: Credit/Fail Grading

Veterinary Technology (VTEC)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

VTEC 424 - Introduction to Veterinary Technology
Credits: 2
An overview of the veterinary technology field. Topics in veterinary office practice management are covered, including, appointment scheduling, inventory control, financial transactions, client communication and regulatory, legal, and ethical aspects of veterinary practice. Other topics include veterinary technician and animal science career options, professional development and domestic animal management including breed identification, terminology, and husbandry.
Grade Mode: Letter Grading

VTEC 430 - Companion Animal Behavior and Handling Techniques
Credits: 4
Overview of the development, selection, genetics, and function of specific breeds of companion animals. Canine and feline handling and restraint skills will be demonstrated and practiced. General dog and cat, as well as breed-specific, behavior is included. Other companion animals such as parrots, rabbits, and pigs are reviewed as time allows.
Equivalent(s): AAS 430
Grade Mode: Letter Grading

VTEC 435 - Animal Health and Laboratory Diagnostics
Credits: 4
Covers the principles of maintaining animal health by preventing and managing disease via husbandry, immunization, and diagnostic testing. Focus is on domestic species; primarily dogs, cats, horses and cows. Topics include parasitology, microbiology, immunology, and clinical, gross and histopathology. Laboratory activities include fecal flotation, urinalysis, complete blood count and blood chemistry, bacterial culture and sensitivity testing, gram staining, serology, laboratory safety, and principles of sample collection and quality control. VTEC and AAS majors only.
Attributes: Biological Science(Discovery); Discovery Lab Course
Grade Mode: Letter Grading
Special Fee: Yes

VTEC 449 - Clinical Animal Nursing Techniques I
Credits: 4
Essential skills and knowledge for the care of small animals, focusing on companion animal species. Wellness protocols an basic nursing skills (medication administration, nail trimming, ear cleaning, anal gland expression, wound care, injections, phlebotomy, electrocardiogram, blood pressure measurement) will be discussed and practiced.
Prerequisite(s): VTEC 430 with a minimum grade of C+.
Equivalent(s): AAS 449
Grade Mode: Letter Grading
Special Fee: Yes

VTEC 497 - Veterinary Technology Work Experience
Credits: 0
Provides students supervised introductory hands-on experience in a veterinary medical facility. Students apply skills learned in animal handling and nursing, laboratory methods, client communication and practice management courses. Students are responsible for obtaining a position in an approved veterinary facility and need to complete a minimum of 80 hours of work to fulfill course requirements. Must have rabies vaccine series completed prior to the start of the semester.
Prerequisite(s): VTEC 449 with a minimum grade of C+.
Grade Mode: Credit/Fail Grading

VTEC 550 - Clinical Animal Nursing Techniques II
Credits: 4
Builds on materials presented in VTEC 449, Clinical Animal Nursing Techniques I. Covers veterinary imaging modalities including radiographic and ultrasonographic techniques and safety; nursing care of hospitalized patients, emergency medicine, and laboratory animal and exotic companion animal medicine.
Prerequisite(s): VTEC 449 with a minimum grade of C+.
Equivalent(s): AAS 550
Grade Mode: Letter Grading
Special Fee: Yes

VTEC 565 - Pharmacology for Veterinary Technicians
Credits: 4
This course provides study in the area of veterinary medicines emphasizing classes and actions of drugs, calculating dosages, proper administration, and dispensing of drugs. Topics include general pharmacology, calculating dosages, pharmacy regulation guidelines and record keeping. Case-based learning is utilized to correlate common diseases in companion animals with associated pharmacological agents. Specifically, disease pathogenesis, diagnosis, and treatment options are discussed along with pertinent technician interventions and evaluations.
Prerequisite(s): AAS 428 with a minimum grade of C+.
Equivalent(s): VTEC 265
Grade Mode: Letter Grading

VTEC 575 - Veterinary Anesthesia and Surgical Assisting
Credits: 4
This course provides the theoretical knowledge and practical experience necessary to provide safe and effective anesthesia and analgesia to veterinary patients; including providing nursing care and assistance in all aspects of veterinary surgery and anesthesia.
Prerequisite(s): VTEC 565 (may be taken concurrently) with a minimum grade of C+.
Equivalent(s): VTEC 275
Grade Mode: Letter Grading
Special Fee: Yes

VTEC 579 - Small Animal Practicum I
Credits: 4
This course provides veterinary technology students service learning opportunities. Students manage a wellness clinic for pets, developing staffing/appointment schedules, and performing appropriate procedures on pets. Additionally, students travel off-campus to provide medical, husbandry, and behavioral care for shelter animals. Successful ascertainment and use of correct veterinary terminology is required. A surgical rotation is conducted to introduce techniques in anesthesia, surgical nursing, and dentistry.
Prerequisite(s): VTEC 449 with a minimum grade of C+ and VTEC 565 with a minimum grade of C+.
Grade Mode: Letter Grading
Special Fee: Yes

VTEC 580 - Small Animal Practicum II
Credits: 4
Students manage a wellness clinic for pets, developing staffing/appointment schedules, and perform appropriate procedures on pets. Additionally, students travel off campus to provide medical care for shelter animals. A surgical rotation is conducted to reinforce techniques in anesthesia/surgical nursing and dentistry. Nursing care assignments are due throughout the semester to aid students in the integration of knowledge gain during their academic coursework. This is a four-credit course offered for VTEC majors only, and by permission only.
Prerequisite(s): VTEC 579 with a minimum grade of C+ and VTEC 575 with a minimum grade of C+.
Grade Mode: Letter Grading
Special Fee: Yes

VTEC 583 - Large Animal Practicum
Credits: 2
An applied large animal class covering basic veterinary nursing care and procedures, focusing on horses and cows. The majority of class time is spent practicing hands-on skills with animals. Restricted to veterinary technology students only.
Prerequisite(s): AAS 421 with a minimum grade of C+ and VTEC 449 with a minimum grade of C+.
Equivalent(s): VTEC 283
Grade Mode: Letter Grading

VTEC 595 - Veterinary Technology Internship
Credits: 3
Provides students supervised hands-on experience in a veterinary medical facility within a clinical setting, students apply skills learned in animal handling and nursing, diagnostics and laboratory, client communication and practice management courses. Students are responsible for obtaining a position in an approved veterinary facility prior to the start of the semester. Open to veterinary technology students only.
Prerequisite(s): VTEC 550 with a minimum grade of C+ and VTEC 579 with a minimum grade of C+.
Equivalent(s): VTEC 295
Grade Mode: Credit/Fail Grading

VTEC 599 - Comprehensive VTNE Review
Credits: 4
Course will prepare veterinary technology students for the Veterinary Technician National Examination (VTNE). Topics include VTNE qualification and registration procedures and standardized test-taking strategies but will primarily focus on a systematic review of the ten knowledge domains covered on the VTNE. Specific course content will vary based on yearly changes to VTNE content and based on students' performance on a VTNE readiness assessment at the start of the course.
Prerequisite(s): VTEC 435 with a minimum grade of C+ and VTEC 550 with a minimum grade of C+ and VTEC 575 with a minimum grade of C+ and VTEC 579 with a minimum grade of C+.
Grade Mode: Letter Grading
Special Fee: Yes

Women's and Gender Studies (WGS)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

WGS 401W - Introduction to Women's Studies
Credits: 4
Interdisciplinary survey of the major areas of women's studies: women's history, cross-cultural perspectives, women in literature, psychology of women, etc. Basic principles and concepts fundamental to more advanced women's studies research. Topics vary. Required for major and minor.
Attributes: Social Science (Discovery); Inquiry (Discovery); Writing Intensive Course
Equivalent(s): WS 401, WS 401H
Grade Mode: Letter Grading

WGS 403 - Gender Interactions in College Sports Culture
Credits: 2
An integrative view of growing up as an athlete in American culture. Analysis of major perspectives on human development and implications in sports and education. With emphasis on gender, sexual assault, and racism.
Equivalent(s): WS 403
Grade Mode: Credit/Fail Grading

WGS 405 - Gender, Power and Privilege
Credits: 4
This course explores the diversity of women's lives through the dynamics of status, power, privilege, and inequality in contemporary United States. Students will examine women's diverse experiences by using the theoretical framework of the social construction of race, gender, economic class, and sexual orientation in historical context. We will examine categories of difference and the processes, philosophical developments, institutions, and conditions that lead to and rely on power and privilege in modern American society.
Attributes: Humanities(Disc)
Equivalent(s): WS 405
Grade Mode: Letter Grading

WGS 444A - Race Matters
Credits: 4
Class examines race categories in the United States and how these historically changing categories shape our diverse realities across racial, ethnic, gendered, classed, and national identities. Students examine race as a category of difference and explore the multiple ways that individuals claim racial identities. Specific attention focuses on how diverse women have made history in their own lives and in the lives of others by resisting the interlocking systems of oppression.
Attributes: Historical Perspectives(Disc); Inquiry (Discovery)
Equivalent(s): WS 444A
Grade Mode: Letter Grading

WGS 505 - Survey in Women's Studies
Credits: 4
In-depth study of topics not covered in regular course offerings. The course explores the breadth and depth of Women's Studies from a historical perspective. In order to understand Women's Studies currently, students look at the historical foundations that contribute social, political, and economic influences on the topics. Barring duplication of topic, may be repeated for credit.
Attributes: Historical Perspectives(Disc); Inquiry (Discovery)
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): WS 505
Grade Mode: Letter Grading

WGS 510 - Framing Feminism: Gender Politics in Film
Credits: 4
This course examines the history of feminist struggle in the U.S. by critically viewing and analyzing diverse films from the 1970s to the present. Students learn about the three waves of feminism and the various sociocultural, economic, sexual and political issues faced by women in the long and ongoing quest to achieve gender equality. Students explore methods of historical inquiry and film criticism to enable complex analyses of historical developments and contemporary arrangements of power. Attention is paid to how multiple identities and forms of oppression intersect in women's diverse lived experiences.
Attributes: Historical Perspectives(Disc)
Equivalent(s): WS 510
Grade Mode: Letter Grading

WGS 632W - Feminist Thought
Credits: 4
Theories of women's oppression and emancipation explored from various historical, political, cultural, and social perspectives. A major goal of the course is to increase awareness of historical and contemporary feminist approaches to understanding women's experiences, representations, and relative positions in societies. The course also considers the interrelation of theory and practice and the impact of past feminist theories on feminist movements.
Attributes: Writing Intensive Course
Prerequisite(s): WS 401 with a minimum grade of D- or WS 405 with a minimum grade of D- or WGS 401W with a minimum grade of D- or WGS 405 with a minimum grade of D-.
Equivalent(s): WS 632
Grade Mode: Letter Grading

WGS 795 - Independent Study
Credits: 1-4
For advanced students who have the preparation to carry out an individual project of supervised research on a specific women's studies topic. Preparation should include WS 401 or equivalent, and/or other women's studies courses. Barring duplication of topic, may be repeated.
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): WS 795
Grade Mode: Letter Grading

WGS 796 - Advanced Topics
Credits: 4
Advanced or specialized topics not normally covered in regular course offerings. May be repeated, but not in duplicate areas.
Repeat Rule: May be repeated up to 2 times.
Equivalent(s): WS 796, WS 796W
Grade Mode: Letter Grading

WGS 797 - Internship
Credits: 4
Students gain practical experience in a woman-focused agency or organization. Plan of study and requirements are developed together with a faculty adviser and the student's workplace adviser. Bi-monthly seminar with all internship students and instructor.
Repeat Rule: May be repeated up to 2 times.
Equivalent(s): WS 797
Grade Mode: Letter Grading

WGS 798W - Colloquium
Credits: 4
Intensive study of specialized topic for advanced students. Topics vary with instructor. Barring duplication of topic, may be repeated for credit.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to 8 times.
Equivalent(s): WS 798
Grade Mode: Letter Grading

WGS 799H - Honors Thesis
Credits: 4-8
With a faculty sponsor, students enrolled in the honors-in-major program develop an independent, investigative project in women's studies. Written thesis.
Attributes: Honors course
Equivalent(s): WS 799
Grade Mode: Letter Grading

Zoology (ZOOL)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

ZOOL 400 - Professional Perspectives in Zoology
Credits: 1
Presentations by departmental faculty provide an informal overview of various zoological topics and professional opportunities. The course acquaints students with faculty, provides information on departmental research projects, and facilitates early research involvement for students. Required for all first-year zoology majors.
Grade Mode: Credit/Fail Grading

ZOOL 401 - Human Biology
Credits: 0 or 4
How does the human body function in the face of constant flux In this introductory biology course you will explore the molecules, cells, and organ systems that keep you healthy though the multidisciplinay lenses of chemistry, genetics, and homeostatis. Hands-on experimentation allows you to investigate common health-related questions such as the effects of caffeine on reaction time and the effects of handwashing on bacterial growth and transmission. Cannot be taken for credit after BMS 507 and BMS 508. Lab.
Attributes: Biological Science(Discovery); Discovery Lab Course
Equivalent(s): ZOOL 507, ZOOL 508
Grade Mode: Letter Grading
Special Fee: Yes

ZOOL 518 - Comparative Morphology and Biology of Vertebrates
Credits: 0 or 4
Why are vertebrates so successful on Earth? In this hands-on comparative biology course you will systematically examine the evolutionary history of form and function by exploring key adaptations that allowed vertebrates to diversify and thrive in the aquatic, terrestrial, and arboreal habitats they occupy today. In lab you will hone your dissection skills as you track ancestral and derived characteristics in 5 representative species on the vertebrate tree of life. Lab.
Prerequisite(s): BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or NR 439 with a minimum grade of D- or BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ZOOL 529 - Developmental Biology
Credits: 0 or 4
Developmental biology explores how organisms construct themselves in each generation, and how those processes interact with ecological and evolutionary forces. The course examines development in various phyla, with an overarching focus on the design and interpretation of experiments using both classical and modern techniques. Labs include student-designed experiments and observation of development in several species of vertebrate embryos. Lab.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

ZOOL 542 - Ornithology
Credits: 4
Students explore the biology, behavior and biodiversity of birds in this animal survey course. Ethical birdwatching, census techniques, and identification skills will be developed by observing resident and migrant species throughout the semester. Avian diversity across the UNH campus will be documented and compared at multiple time points and locations. Lecture, Lab, and Optional off-campus field trips.
Prerequisite(s): BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-.
Grade Mode: Letter Grading

ZOOL 555 - Introduction to Entomology
Credits: 4
This course is about insects, the animal taxon that represents 50% of all life forms on Earth. During this course students will explore this incredible diversity by studying insects from inside out and learning about major evolutionary events in the last 500 million years that shaped this incredible diversity. This course will also highlight the beneficial and detrimental roles insects play in human society: students will gain insights into medical and veterinary entomology, coastal entomology, principles of sustainable pest management and insect conservation. Throughout the course, students will broadly apply online tools for insect identification and will be exposed to community driven nature conservation and monitoring efforts using online applications, such as inaturalist and bugguide. Lab.
Prerequisite(s): BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ZOOL 566 - Herpetology
Credits: 4
This course will serve as an introduction to the morphology, behavior, and evolutionary ecology of reptiles (tuataras, turtles, snakes, lizards, and crocodilians) and amphibians (frogs, salamanders, and caecilians), with a special emphasis on New England taxa. The course will include field excursions, short-term research projects, and the comparative examination of specimens.
Prerequisite(s): BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ZOOL 600 - Field Experience
Credits: 1-4
A supervised experience providing the opportunity to apply academic experience in settings associated with future professional employment and/or related graduate opportunities. Must be approved by a faculty advisor selected by the student.
Repeat Rule: May be repeated for a maximum of 8 credits.
Grade Mode: Credit/Fail Grading

ZOOL 610 - Principles of Aquaculture
Credits: 4
Introduces the culture practices employed for production of aquatic organisms. Topics include ecological and environmental considerations, selective breeding, nutrition, diseases, processing, and marketing. Emphasis on finfish.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading

ZOOL 613W - Animal Behavior
Credits: 5
In this course we will first investigate the mechanisms of behavior--how do animals behave the way they do? We'll then spend the bulk of the semester exploring the ecology and evolution of behavior--why do animals behave the way they do? In lab, we will use hands-on activities to complement material from class, and you'll gain first-hand research experience when you design and conduct your own animal behavior study. Lab.
Attributes: Writing Intensive Course
Prerequisite(s): BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-.
Equivalent(s): ZOOL 613
Grade Mode: Letter Grading
Special Fee: Yes

ZOOL 625 - Principles of Animal Physiology
Credits: 3
Introduces the principles of animal function. The major systems (digestion, metabolism, respiration, circulation, osmotic and ionic regulation, nerve-muscle function, endocrine control) are covered with emphasis on functional mechanisms at the cell and tissue levels.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Equivalent(s): ANSC 627
Grade Mode: Letter Grading

ZOOL 626W - Animal Physiology Laboratory
Credits: 2
Basic training in the measurement of function in animals, data analysis and expression, and the development of scientific communication skills.
Co-requisite: ZOOL 625
Attributes: Writing Intensive Course
Equivalent(s): ZOOL 626
Grade Mode: Letter Grading
Special Fee: Yes

ZOOL 690 - Evolution
Credits: 4
Evolutionary biology is about uncovering the past, understanding the present, and predicting the future of animals, plants, and microbes. Is also offers insight into how scientific ideas change through time. This course covers natural selection and adaptation, phylogeny, population genetics and structure, origins and extinction of species, domestication, and evolutionary medicine. Additional topics may include human evolution and evolutionary impacts, biogeography, and social evolution, as well as the intersections between evolution, ecology and development.
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Equivalent(s): ZOOL 690W
Grade Mode: Letter Grading

ZOOL 690W - Evolution
Credits: 4
Evolutionary biology is about uncovering the past, understanding the present, and predicting the future of animals, plants, and microbes. Is also offers insight into how scientific ideas change through time. This course covers natural selection and adaptation, phylogeny, population genetics and structure, origins and extinction of species, domestication, and evolutionary medicine. Additional topics may include human evolution and evolutionary impacts, biogeography, and social evolution, as well as the intersections between evolution, ecology and development.
Attributes: Writing Intensive Course
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Equivalent(s): ZOOL 690
Grade Mode: Letter Grading

ZOOL 708 - Stream Ecology
Credits: 4
Ecological relationships of organisms in flowing water; streams as ecosystems. Lectures on physical and chemical features of streams, floral and faunal communities, and factors controlling populations and behavior of stream organisms. Lab exercises employ both field and laboratory experimental techniques. Lab. (Not offered every year.)
Grade Mode: Letter Grading
Special Fee: Yes

ZOOL 710 - Sharks and Bony Fishes
Credits: 0 or 4
Some fish swimming today are hundreds of years old, whereas others complete their life cycle in two months! This course provides an introduction to the diversity of fishes found across the globe, including elasmobranchs (sharks, skates, and rays) and teleosts (bony fishes). Particular attention will be paid to fishes local to New Hampshire and New England. Students will learn about fish anatomy, physiology, and ecology. Lab. (Offered in alternative years.)
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Grade Mode: Letter Grading
Special Fee: Yes

ZOOL 726 - Conservation Behavior
Credits: 4
What's the best way to deter an elephant from raiding crops? Is it with chili peppers? Bees? This is one example from the new interdisciplinary field of "conservation behavior," which uses the study of animal behavior to inform how we manage wildlife populations. This course targets students well-versed in either animal behavior or wildlife ecology who wish to learn more about the other side. We will focus heavily on reading, writing, discussion, and career preparation.
Prerequisite(s): ZOOL 613 with a minimum grade of D- or ZOOL 613W with a minimum grade of D- or NR 433 with a minimum grade of D- or NR 650 with a minimum grade of D-.
Grade Mode: Letter Grading

ZOOL 733W - Behavioral Ecology
Credits: 0 or 4
Behavioral ecology is the evolution of animal behavior played out on the stage of ecology--why might a certain behavior be adaptive in a certain context? In this course, we will pursue in-depth, high-level explorations of the central topics of animal behavior, all through the lens of evolution. We will also focus heavily on improving reading, writing, and presentation skills.
Attributes: Writing Intensive Course
Prerequisite(s): ZOOL 613 with a minimum grade of D- or ZOOL 613W with a minimum grade of D-.
Equivalent(s): ZOOL 733
Grade Mode: Letter Grading

ZOOL 736 - Genes and Behavior
Credits: 4
Genes and behavior examines the genetic underpinnings of animal behavior, and how behavior evolves on a genetic level. The course primarily relies on readings from the primary literature, using examples from laboratory model organisms, animals in their natural habitats, and humans. Topics include aggressiveness, social behavior, personality, parental care, communication, mating behavior, novelty seeking behavior, and foraging. This interdisciplinary course examines these behaviors at multiple levels, including genomics, population genetics, molecular genetics, epigenetics, endocrinology, and neurobiology.
Prerequisite(s): (GEN 604 with a minimum grade of D- or ANSC 612 with a minimum grade of D-) and (ZOOL 613 with a minimum grade of D- or ZOOL 613W with a minimum grade of D-).
Grade Mode: Letter Grading

ZOOL 740 - Acoustic Ecology
Credits: 4
This course examines the acoustic environment and how alterations to the acoustic environment from human activities and climate change result in permanent changes to animal behavior and the resulting soundscape. Focusing on using acoustics as a tool to monitor species and habitats, students will learn quantitative approaches and best practices for acoustic ecology investigations. Students will explore the emerging field of ecological acoustics through primary literature and hands-on, independent research in habitats surrounding UNH campus. This course is intended for advanced undergraduate or graduate students interested in animal behavior, ecology, wildlife and conservation biology, or zoology.
Prerequisite(s): BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-.
Grade Mode: Letter Grading
Special Fee: Yes

ZOOL 777W - Neuroethology
Credits: 3
Students taking this course will discover how some of the most remarkable behavioral adaptations in animals can be understood by examining specialized sensory systems and neural circuits. By exploring the complex interactions between animal behavior, neural systems, evolutionary relationships, anatomy, physiology and ecology, students will be better equipped to understand the neural basis of behavior. A culminating writing project will help sharpen students' scientific writing skills, and the ability to understand the primary neuroethology literature.
Attributes: Writing Intensive Course
Prerequisite(s): (BIOL 411 with a minimum grade of D- or BIOL 411H with a minimum grade of D- or BIOL 413 with a minimum grade of D-) and (BIOL 412 with a minimum grade of D- or BIOL 412H with a minimum grade of D- or BIOL 414 with a minimum grade of D-).
Equivalent(s): ZOOL 777
Grade Mode: Letter Grading

ZOOL 795 - Independent Investigations in Zoology
Credits: 1-4
Independent study in a topic related to Zoology, arranged by the student with a faculty sponsor. Enrollment by permission only.
Repeat Rule: May be repeated for a maximum of 8 credits. May be repeated up to 5 times.
Grade Mode: Letter Grading

ZOOL 799H - Honors Senior Thesis
Credits: 1-4
Working under the direction of a faculty sponsor, the student plans and carries out independent research resulting in a written thesis. Limited to students entering their senior year; required for students in the honors program or working toward honors-in-major. A two-semester sequence. 2-4 credits each semester. IA (continuous grading) given at the end of the first semester.
Attributes: Honors course; Writing Intensive Course
Repeat Rule: May be repeated for a maximum of 8 credits.
Equivalent(s): ZOOL 799
Grade Mode: Letter Grading

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