

MATH STUDIES / ELEMENTARY EDUCATION / GENERAL SPECIAL EDUCATION (B.S.)

<https://cps.unh.edu/online/program/bs/math-studies-elementary-education-general-special-education>

Description

Individuals who complete this program will be eligible for the New Hampshire Department of Education teacher certification in Elementary Education (K-6) and General Special Education.

This is a field-based 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 in the field, 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 certification 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. 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. 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 one overlap being utilized between the Major and Minor.

All General Education requirements, including CRIT 602 Advanced Critical Analysis and Strategic Thinking and IDIS 601 Interdisciplinary Seminar, 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 | | 4 |
| Knowledge of Human Thought & Expression | | 4 |
| CRIT 602 | Advanced Critical Analysis and Strategic Thinking | 4 |
| IDIS 601 | Interdisciplinary Seminar | 4 |
| 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 certification.

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 Math/Elementary Ed and General Special Ed | | |
| MTH 504 | Statistics | 4 |
| 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 | | |
| Praxis Core Academic Skills for Educators Exam Required ² | | |
| EDC 500 | Foundations of Education | 4 |
| Introductory Level Education Courses | | |
| EDC 700 | Introduction to Field Experience and Program Requirements | 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 | Managing Student Behavior | 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 School 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 Praxis Core Exam scores must be submitted prior to taking EDC 700 Introduction to Field Experience and Program Requirements

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 Certification Requirements

The following requirements must be completed in order to be recommended to the state for Teacher Certification:

- A **minimum GPA of 3.0** is required for state certification
- **Praxis Core Academic Skills For Educators Exam** required. Passing Praxis Core Exam scores must be submitted prior to taking EDC 700 Introduction to Field Experience and Program Requirements.
- **Praxis II-Multiple Subject or Middle School Content Exam** Required. Students must attempt to pass Praxis II exam prior to taking the Culminating Teaching Experience & Seminar. Passing exam scores are required for State Certification.
- **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 | | Credits |
|--------------------------|--|-----------|
| Fall | | |
| 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 504 | Statistics | 4 |
| MTH 510 | Pre-Calculus | 4 |
| Credits | | 16 |

Second Year

Fall

| | | |
|--------------------------|--------------------|-----------|
| MTH 702 | Mathematical Proof | 4 |
| MTH 703 | Number Systems | 4 |
| MTH 705 | Calculus I | 4 |
| General Education Course | | 4 |
| Credits | | 16 |

Spring

| | | |
|----------------|------------------------|-----------|
| MTH 704 | Geometric Structures | 4 |
| MTH 706 | History of Mathematics | 4 |
| PSY 525 | Human Development | 4 |
| Elective | | 4 |
| Credits | | 16 |

Third Year

Fall

| | | |
|----------------|---|-----------|
| CRIT 602 | Advanced Critical Analysis and Strategic Thinking | 4 |
| IDIS 601 | Interdisciplinary Seminar | 4 |
| EDC 500 | Foundations of Education | 4 |
| EDC 700 | Introduction to Field Experience and Program Requirements ^{Nonclinical; Complete CHRC Process} | 1 |
| EDC 703 | The Dynamic Role of the Special Educator ^{Clinical A} | 4 |
| Credits | | 17 |

Spring

| | | |
|----------------|--|-----------|
| EDC 701 | Special Education Law ^{Nonclinical} | 4 |
| EDC 716 | Students with Disabilities ^{Nonclinical} | 4 |
| EDC 717 | Managing Student Behavior ^{Clinical A} | 4 |
| EDC 719 | Using Technology to Teach Social Studies ^{Clinical A} | 4 |
| Credits | | 16 |

Fourth Year

Fall

| | | |
|----------------|--|-----------|
| EDC 718 | Transition Planning & Developing IEPs ^{Clinical B} | 2 |
| EDC 721 | Assessment of Students with Disabilities ^{Clinical B} | 4 |
| EDC 722 | Strategies for Teaching Science ^{Clinical A} | 4 |
| EDC 723 | Teaching Language Arts and Literacy ^{Clinical A} | 6 |
| Credits | | 16 |

Spring

| | | |
|----------------------|---|------------|
| EDC 724 | Elementary School Mathematics Methods ^{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

- 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.