

KINESIOLOGY (KIN)

The mission of the Department of Kinesiology is to generate, transmit, and apply knowledge about the role of physical activity (including exercise, movement, outdoor adventure experiences, and sport) in the advancement of health in society. The department has several teaching, research, and service functions that support this mission, including the preparation of professionals in the five majors described below. While programs vary in emphasis, each curriculum offers students fundamental knowledge in the following areas: the biological, psychological, and sociocultural foundations and consequences of physical activity; the pedagogical and rehabilitative aspects of physical activity; and the management and marketing of delivery systems in the field. Each program makes extensive use of field experiences and internships that blend theory with practice.

The department offers five areas of study for majors: athletic training, exercise science, health and physical education, outdoor education, and sport studies. Candidates for degree requirements in any of the department majors must satisfy all University Discovery Program requirements in addition to satisfying specific program requirements.

<http://www.chhs.unh.edu/kin/index>

Programs

- Applied Human Anatomy & Physiology (<http://catalog.unh.edu/archives/2017-2018/undergraduate/health-human-services/programs-study/applied-human-anatomy-physiology>)
- Athletic Training (<http://catalog.unh.edu/archives/2017-2018/undergraduate/health-human-services/programs-study/athletic-training>)
- Coaching (<http://catalog.unh.edu/archives/2017-2018/undergraduate/health-human-services/programs-study/coaching>)
- Exercise Science (<http://catalog.unh.edu/archives/2017-2018/undergraduate/health-human-services/programs-study/exercise-science>)
- Health and Physical Education (<http://catalog.unh.edu/archives/2017-2018/undergraduate/health-human-services/programs-study/health-physical-education>)
- Interdisciplinary Health (<http://catalog.unh.edu/archives/2017-2018/undergraduate/health-human-services/programs-study/interdisciplinary-health>)
- Kinesiology (<http://catalog.unh.edu/archives/2017-2018/undergraduate/health-human-services/programs-study/kinesiology/kinesiology-minor>)
- Outdoor Adventure Leadership (<http://catalog.unh.edu/archives/2017-2018/undergraduate/health-human-services/programs-study/outdoor-adventure-leadership>)
- Outdoor Education (<http://catalog.unh.edu/archives/2017-2018/undergraduate/health-human-services/programs-study/outdoor-education>)
- Sport Studies (<http://catalog.unh.edu/archives/2017-2018/undergraduate/health-human-services/programs-study/sport-studies>)

Courses

Kinesiology (KIN)

KIN 406 - Intro to Athletic Training

Credits: 1

Introduction to the profession of athletic training. Past, present, and future of athletic training in the U.S. and Internationally. Components of the academic and experiential preparation of athletic trainers. Overview of the professional and personal attributes to be successful in a health care profession. Kin: Athletic Training and Undeclared HHS majors only.

KIN #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); Social Science GP 7; Inquiry (Discovery)

KIN 444B - Coolest Game?: Hockey and History

Credits: 4

This course uses hockey as a vehicle for exploration and practice in three critical processes of scholarship: 1) analyzing and framing questions, 2) employing different methods/sources for pursuing answers to the questions, 3) presenting the results of research. Research exercises, discussions, and papers consider hockey's development in larger social and cultural contexts/practices such as ethnicity, nationalism, technology, mass media and marketing, gender relations, labor relations, and regionalism. The course also looks at hockey as a medium of craft, hero formation, community, and collective violence. Students read and analyze interdisciplinary articles and books, and also work with a range of historical sources, including those in the UNH Archives and the Charles Holt Archives of American Hockey. Writing intensive.

Attributes: Historical Perspectives(Disc); Historical Perspectives GP 4; Inquiry (Discovery); Writing Intensive Course

KIN 444C - Amped Up: Social and Psychological Perspectives on Adventure

Credits: 4

Interest in the topic of adventure has exploded in recent years; with enough money, almost any adventure is available to anyone. The widespread rise in popularity of adventure brings questions, however. What is the role of adventure in modern society? What is its value to individuals? Through lectures, written assignments, group projects, multimedia, and experiential learning, this course surveys psychological, sociological, and anthropological perspectives on these and students' own questions. Special fee.

Attributes: Social Science (Discovery); Social Science GP 7; Inquiry (Discovery); Writing Intensive Course

KIN 500 - Introduction to Health and Physical Education**Credits:** 4

This is a foundational course for anyone interested in the field of health and physical education (PE). Topics will include the role of health and PE in society, health and PE as a means for improving academic outcomes and the role health and PE teachers contribute to creating a culture of wellness in schools. Other topics for discussion include career considerations and future trends in the profession.

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. May repeat once for credit. Special fee. Cr/F.

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); Biological Science GP 3B**KIN 506 - Concepts of Athletic Training for the Professional****Credits:** 4

Introduces techniques for prevention, recognition, treatment, and rehabilitation of common athletic injuries. Course is a prerequisite for beginning clinical experience in athletic training rooms for the athletic training professional. Prereq: BMS 507. Open to Athletic Training and HHS undeclared majors only.

KIN 507 - Concepts of Athletic Training Lab**Credits:** 1

Theory and techniques of protective taping and wrapping to prevent common athletic injuries. Techniques of transfer and transportation of injured athletes. Identification of anatomical landmarks. Observation and practice in the University athletic training rooms. Special fee.

KIN 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 and 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); Historical Perspectives GP 4**KIN 521 - Theory of Coaching Basketball****Credits:** 2

Individual and team offense and defense; rules of the game. Problems in team handling and conditioning. Prereq: permission. Pre- or Coreq: KIN 565.

KIN 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.

KIN 523 - Theory of Coaching Hockey**Credits:** 2

Basic hockey skills. Fundamentals of individual and team offense and defense; coaching methods; rules. Prereq: student must have basic skating skills prior to taking course. Pre- or Coreq: KIN 565. Special fee.

KIN 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. Prereq: permission. Pre- or Coreq: KIN 565. Only open to KIN: Sport Studies majors.

KIN 527 - Scientific Foundations of Health and Fitness**Credits:** 4

Course provides students with practical, scientific, entry-level information relative to physical conditioning, health, and wellness. Students are given theoretical information that will be followed by practical, hands-on experiences offered through laboratories and assessments of the student's personal health status and future wellness goals. No credit given if credit earned for NUTR 506. Special fee. Writing intensive.

Attributes: Biological Science(Discovery); Discovery Lab Course; Biological Science GP 3B; Writing Intensive Course**KIN 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. Prereq: permission. Pre- or Coreq: KIN 565.

KIN 533 - Basic Scuba**Credits:** 3

Full semester in the fundamentals of scuba diving. Through a progressive series of classroom lectures and pool sessions, students gain the knowledge and skill necessary to conduct themselves with competence underwater. Emphasizes safety and problem prevention. Once the students are ready, further training takes place in an open ocean environment. NAUI Certification for successful completion of all course requirements and at least five open-water dives. Strong swimming ability required. Special fee. Lab. Credit/Fail.

KIN 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, routesetting, individual and 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. Special fee. Optional certification fee. Lab.

KIN 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. Special fee. Lab.

KIN 541 - Management of Challenge Courses**Credits: 4**

Provides students with an introduction to the basic facilitation/technical skills to manage a challenge course program. Exposure to intermediate technical skills usually required for lead facilitators. Specific topics include group process, framing, and sequencing, belay methods, participant and instructor equipment, operating procedures for low and high challenge course elements, and industry standards. Special fee. Lab.

KIN 542 - Sea Kayaking**Credits: 2**

An introduction to the technical, teaching, and leadership skills required to lead inland kayaking programs and to assist with coastal canoeing programs. Emphasis on individual kayaking skills, self- and group-assisted rescues, safety and group management in a marine environment, and tactics for ocean travel and navigation. Special fee. Lab.

KIN 543 - Winter Adventure Programming**Credits: 2**

An introduction to winter programming and backcountry travel, including snowshoeing and Nordic skiing, winter interpretation activities, backpacking, and winter camping. Emphasis on teaching of introductory winter programs and trips. Prereq: KIN:OE major, KIN 551 or instructor permission. Special fee. Lab.

KIN 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. Prereq: KIN 547 or instructor permission; KIN: Outdoor Education majors only. Special fee. Lab.

KIN 546 - White Water 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. Prereq: Previous canoeing experience or KIN 552. Special fee. Lab.

KIN 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. Prereq: KIN 540 or instructor permission. Special fee. Lab.

KIN 548 - Winter Expedition Programming**Credits: 4**

Introduces methods and techniques of winter expedition travel including camping, snowshoeing, alpine climbing skills, technical skiing and ice climbing skills. A variety of teaching styles are used to familiarize students with each topic area, and occur in classroom, basecamp, and wilderness settings. Prereq: KIN OE majors, KIN 551. Special fee. Lab.

KIN 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. Special fee. Lab.

KIN 550 - Outdoor Education Philosophy and Methods**Credits: 4**

Explores the philosophical basis for experiential and outdoor education. Experiential exercises and readings focus on the role of risk, traditional versus progressive education, role of nature, ethics, models of learning and facilitation, and developing a personal philosophy of outdoor education. Includes full-day outdoor education laboratory experiences. Special fee. Writing intensive.

Attributes: Inquiry (Discovery); Writing Intensive Course

KIN 551 - Adventure Programming: Backcountry Based Experiences**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. Special fee. Lab.

KIN 552 - Adventure Programming: Water Based Experiences**Credits: 3**

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. Special fee. Lab.

KIN 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.

Attributes: Social Science GP 7

KIN 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); Historical Perspectives GP 4**KIN 561W - 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. Writing intensive.

Attributes: Historical Perspectives(Disc); Historical Perspectives GP 4; Writing Intensive Course**KIN 562 - Sports 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.

KIN 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.

KIN 570 - Elementary Physical Education Practicum**Credits:** 4

Provides opportunities for developing and refining elementary and special physical education movement content with pedagogical processes.

Emphasizes demonstrating competence in teaching and establishing a least-restrictive learning environment. Special fee. Prereq: KIN 610; KIN: HLTH & PHYS ED. Writing intensive.

Attributes: Writing Intensive Course**KIN 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.

KIN 585 - Emergency Medical Responder**Credits:** 4

Standards of practice that conform to the content of the U.S. Department of Transportation curriculum for Emergency Medical Responder. 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 and EMR certifications exams. Prereq: KIN: Athletic Training; KIN: Exercise Science; HHS: undeclared. Lab. Special fee.

KIN 600 - Movement and Gymnastics Exploration**Credits:** 4

Combines the elements of movement education and gymnastics progressions to develop a basis for students to learn the fundamentals of movement and how to teach efficient and safe movement and gymnastics skills in a variety of settings. Includes fundamental movement skills, movement elements, fundamental gymnastics skills, and fundamental gymnastics spotting skills. Only open to Human Development & Family Studies, and KIN: Hlth & Phys Ed majors.

KIN 601 - Lifetime Sports**Credits:** 3

Provides students with the technical knowledge as well as the psychomotor and pedagogical skills necessary for instructing lifetime activities, including tennis, golf and cross country skiing, among others.

KIN 603 - Team Sports**Credits:** 3

Provides students with the technical, physical, and pedagogical skills necessary for instructing team sports, including soccer, basketball and volleyball, among others.

KIN 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); Biological Science GP 3B**KIN 610 - Elementary Physical Education Pedagogy****Credits:** 4

Planning, implementing, and evaluating a movement-based curricular model of instruction relative to teaching preschool and elementary-aged children physical education. Systematic observation, teaching, strategies and styles, lesson design, and methods of integrating academic subject matter into elementary physical education. Prereq: Open only to KIN: Hlth & Phys Ed majors.

KIN 620 - Physiology of Exercise**Credits:** 4

Acute and chronic effects of exercise. Muscle physiology, respiration, cardiac function, circulation, energy metabolism, and application to training. Prereq: BMS 507 and BMS 508.

KIN 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. Prereq: KIN 620. KIN Exercise Science majors. Special fee. Writing intensive.

Attributes: Writing Intensive Course**KIN 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. Special fee.

KIN 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.

KIN 648 - Current Issues in Teaching Health**Credits: 4**

Designed to assist students in their understanding of issues related to health and health education.

KIN 650A - Internship in Exercise Science**Credits: 4 or 8**

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 400 contact hours and is a full-time commitment (10 weeks at 40 hours per week) usually taken the summer following the senior academic year. Activities may include graded exercise testing, exercise prescription, and exercise leadership. Must have completed all requirements for the option or have permission from the instructor prior to starting the internship. The course may be repeated once with 4 credits taken each time for a total of 8 credits. Cr/F. (IA continuous grading). Only open to KIN: Exercise Science majors.

KIN 650B - Internship in Outdoor Education**Credits: 2-8**

Experiential learning in a setting appropriate to the student's objectives. An 2 credit internship requires a minimum of 400 hours experience. Provides an appropriate transition from undergraduate education to future employment in the field of outdoor education. Generally done after students have completed all other requirements for the option. Prereq: permission. Cr/F. May be repeated up to a maximum of 8 credits. (IA continuous grading).

KIN 650C - Internship in Sport Studies**Credits: 1-8**

Experiential learning in a setting appropriate to the major option and to student's objectives. An 8 credit internship requires a minimum of 600 hours experience; fewer credits will require proportionally fewer hours. Sport Studies: 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. Prereq: junior/senior major; permission. May be repeated up to a maximum of 12 credits, with no more than 8 credits taken in any given semester. (IA continuous grading).

KIN 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. May be repeated up to a maximum of 4 credits. Prereq: KIN 505, KIN 565. (IA continuous grading).

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. Prereq: BMS 507 and BMS 508.

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. Special fee. Prereq: BMS 507 and BMS 508.

KIN 653B - Biomechanical Analysis of Movement**Credits: 2**

Principles and methodology of analyzing posture and movement. Uses muscle palpation and testing, electromyography, and cinematography to facilitate students' understanding of movement analysis. Special fee. Prereq: BMS 507 and BMS 508.

KIN 655 - Middle School and Secondary Physical Education Pedagogy**Credits: 4**

Planning, implementing, and evaluating curricular models of instruction, as well as effective teaching strategies and styles relevant to secondary (grades 6-12) physical education is studied. Content and process knowledge is applied through micro-teaching episodes with peers. Systematic observation is introduced for the purpose of reflecting on teaching behaviors. Prereq: Only open to KIN: Hlth & Phys Ed majors.

KIN 658 - Evaluation and Care of Athletic Training Injury I**Credits: 4**

Factors involved in the care and recognition of athletic injuries. Mechanisms, etiology, and pathology. Clinical signs and symptoms. Techniques for performing appropriate test and assessment procedures. First aid procedures. Emphasizes fractures, soft tissue injury, and the lower extremities. Prereq: KIN 506; BMS 507 and BMS 508. Writing intensive.

Attributes: Writing Intensive Course**KIN 658L - Evaluation and Care of Athletic Training Injury I Lab****Credits: 1**

Techniques and practice for performing test and assessment procedures for athletic injuries. Prereq: KIN 507.

KIN 659 - Evaluation and Care of Athletic Training Injury II**Credits: 4**

Factors involved in the care and recognition of athletic injuries. Mechanisms, etiology, and pathology. Clinical signs and symptoms. Techniques for performing appropriate test and assessment procedures. First aid procedures. Emphasizes upper extremities, head, and trunk. Prereq: KIN 506; BMS 507 and BMS 508. Writing intensive.

Attributes: Writing Intensive Course**KIN 659L - Evaluation and Care of Athletic Training Injury II Lab****Credits: 1**

Techniques and practice for performing test and assessment procedures for athletic injuries. Prereq: KIN 507.

KIN 660 - Therapeutic Exercise in Athletic Training**Credits: 4**

Rationale, use, and application of exercise in athletic injury rehabilitation. Basic components of designing and implementing rehab programs. Assessment of physical/injury status.

KIN 661 - Therapeutic Exercise in Athletic Training Laboratory**Credits:** 1

Students learn and practice psychomotor techniques associated with rehabilitative and conditioning exercise.

KIN 662 - Therapeutic Modalities in Athletic Training**Credits:** 4

Rationale, use, and application of therapeutic modalities in athletic injury rehabilitation. Principles of electrophysics and biophysics. Physiological effects on body tissues, indications and contraindications, and clinical applications. Prereq: KIN 506; KIN 507.

KIN 663 - Therapeutic Modalities in Athletic Training Laboratory**Credits:** 1

Students use and practice with the devices, machines, and techniques associated with the treatment and rehabilitation of athletic injuries.

KIN 665 - Laboratory Practicum in Athletic Training**Credits:** 2

Clinical experience in athletic training under the supervision of UNH approved clinical instructor. Special fees (sections A-E) 2 credits (per section - 5 credits total). KIN 665A Prereq: KIN 506 and KIN 507. KIN 665B Prereq: KIN 658, and KIN 662. KIN 665C Prereq: KIN 659 and KIN 660. KIN 665D Co- or Prereq: KIN 710. KIN 665E Prereq: KIN 665D.

KIN 666 - Middle School and Secondary Physical Education Practicum**Credits:** 4

Students observe, assist and teach grades 6 through 12 within a public school. The course emphasizes lesson and unit plan design and implementation. Prereq: Open only to KIN: Hlth & Phys Ed majors. Writing intensive.

Attributes: Writing Intensive Course**KIN 667 - Pharmacology for Athletic Training****Credits:** 2

Introduces the use of drugs as they pertain to the health care of athletes and their effect on athletic competition. Topics to be covered will include basic drug action, commonly prescribed medications, dealing with the diabetic and asthmatic athlete and performance enhancing substances. Prereq: junior or senior Standing.

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. Prereq: sophomore, junior or senior Standing.

KIN 670 - General Medical Conditions in Athletics**Credits:** 4

Athletes often sustain non-orthopedic pathologic conditions. An athletic trainer must be able to recognize, assess, and determine appropriate action or referral in an athlete suffering general or systemic illness or disease. Covers conditions affecting the major systems of the body. Prereq: KIN 620.

KIN 675 - Motor Development and Learning**Credits:** 4

Characteristics of motor behavior across time, and the role of movement in children's and adolescents' total development. Growth processes, stage theory, as well as the relationship of maturation, experience, and the environment to motor development.

KIN 676 - Adventure Activities**Credits:** 3

Provides students with the technical, physical, and teaching skills necessary to instruct adventure activities, initiatives, ropes course management, and orienteering. Prereq: KIN: Hlth & Phys Ed majors or permission of instructors. Special fee.

KIN 681 - Theory of Adventure Education**Credits:** 4

Provides an in-depth investigation of the theories that underpin professional practice and research in adventure education. Students examine program applications in different settings, analyze pertinent outdoor education and social science research, and independently complete a research or applied project. Prereq: KIN 550 or permission of the instructor. Special fee. Writing intensive.

Attributes: Writing Intensive Course**KIN 682 - Outdoor Leadership****Credits:** 4

Leadership theories applied through field experiences in adventure programming. Students will understand a variety of leadership, teaching, and communication styles, decision-making models, program planning and logistics, and risk management considerations for planning and delivering adventure programming. Prereq: KIN 541, KIN 550, KIN 686, and two technical skills classes. KIN:OE majors or instructor permission. Special fee.

KIN 684 - Emergency Medical Care: Emergency Medical Technician (EMT)**Credits:** 3

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. Pre- or Coreq: ANSC 511 and ANSC 512, ZOO 401, BMS 507 and BMS 508.

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. Prereq: department approval. Pre- or Coreq: ANSC 511 and ANSC 512, ZOO 401, BMS 507 and BMS 508. Special fee.

KIN 686 - Wilderness Emergency Medical Care**Credits:** 4

Standards of practice for professionals 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. KIN: Outdoor Education majors. Special fee.

KIN 687 - Leadership Practicum**Credits: 4**

Supervised semester-long experience working with an organization external to the university setting to plan, prepare, and implement outdoor education programs and activities. Class sessions involve advanced leadership topics (e.g., current issues in risk management, conflict resolution, social justice issues, adaptive programming). Prereq: KIN OE major. Lab. Special fee.

KIN 690 - Study Abroad in Kinesiology**Credits: 16**

A) Foreign study in, or related to, athletic training. Interested students should contact Program Director, Kinesiology Athletic Training Option. Prereq: KIN: Athletic Training majors only. special fee. Cr/F. Permission.
 B) Foreign study in, or related to, exercise science. Interested students should contact Program Director, Kinesiology Exercise Science Option. Prereq: KIN: Exercise Science majors only. special fee. Cr/F. Permission.
 C) Foreign study in, or related to, outdoor education. Interested students should contact Program Director, Kinesiology Outdoor Education Option. Prereq: KIN: Outdoor Education majors only. special fee. Cr/F. Permission.
 D) Foreign study in, or related to, physical education. Interested students should contact Program Director, Kinesiology Physical Education Option. Prereq: KIN: Physical Education majors only. special fee. Cr/F. Permission.
 E) Foreign study in, or related to, sports studies. Interested students should contact Program Director, Kinesiology Sports Studies Option. Prereq: KIN: Sports Studies majors only. special fee. Cr/F. Permission.

Attributes: World Cultures(Discovery); Foreign Culture GP 5

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 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. May be repeated up to a maximum of 4 credits. Prereq: junior standing; departmental approval. Cr/F.

KIN 694 - Supervised Teaching in Health and Physical Education**Credits: 4-6**

This student teaching course is the capstone/culminating experience for students desiring teaching certifications in Health Education and Physical Education. All other required KIN courses need to be completed before student teaching. This course is for variable credit - 4 credits for teaching PE only, 6 credits for Health and PE. Students must also register for EDUC 694D for 4 credits. This course is Cr/F. Prereq: KIN 666, KIN 648, and KIN 712.

KIN 696 - Independent Study**Credits: 2-4**

An advanced, individual scholarly project under the direct supervision of a faculty member. Prereq: junior or senior; departmental approval. May be repeated to a maximum of 8 credits. Special fee.

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 option 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, available at: <http://www.unh.edu/writing/> Prereq: junior or senior; departmental approval. May be repeated to a maximum of 8 credits. Writing intensive.

Attributes: Writing Intensive Course

KIN 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.

KIN 702 - Health Content and Youth Risk Behavior**Credits: 4**

This course explores the fundamental issues related to health and wellness. Learning outcomes include understanding the seven dimensions of wellness, the overarching foundations of health behaviors, the mind-body connection, how to access social sciences literature, and the eight national health education standards as outlined in the New Hampshire curriculum guidelines. Topics to be considered include adolescence, perception and attitude, self-concept, self-identity, gender, culture, family systems, love and relationships, mental illness and addiction.

KIN 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. Prereq: KIN 621, KIN Exercise Science majors.

KIN 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. Prereq: KIN 620, 621. KIN Exercise Science majors. Special fee.

KIN 706 - Neurology**Credits: 4**

Development, morphology, internal configuration, physiology, histology, function, and pathology of the human nervous system. Prereq: BMS 507-508 or equivalent.

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. Prereq: BMS 507-508 or COMM 521 or equivalent. Special fee. Cr/F.

KIN 710 - Organization and Administration of Athletic Training Programs**Credits: 4**

Principles of organization and administration of athletic training programs; management of personnel; legal aspects; relation of athletic trainer to athletic programs and sports medicine team. Writing intensive.

Attributes: Writing Intensive Course**KIN 712 - Health Education Practicum****Credits: 4**

The purpose of this practicum is to provide students with the opportunity to observe, develop, and teach in a health education classroom. Students are required to accumulate 60 hours of teaching experience in the schools over the course of the semester. Weekly seminars will integrate field experience with content knowledge in health, nutrition and physical activity. Prereq: KIN 648.

KIN 715 - Seminar in Athletic Training**Credits: 4**

Career issues and special topics in athletic training. Students are required to submit and present a term project on assigned topic. Prereq: KIN 665C.

KIN 718 - Career Preparation in Athletic Training**Credits: 4**

The last Athletic Training required course, and designated "Capstone Experience", this course is designed to provide the students with means to integrate and augment concepts, skills, and knowledge gained in all previous major course requirements. Students write an evidenced-based-practice paper understanding and appreciating the role of evidence-based medicine in athletic training. Comprehensive practical exam. Prereq: KIN 665, sections A-D. Athletic Training majors only.

KIN 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. Prereq: KIN 620.

KIN 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 will include friction, linear and angular motion, tissue mechanical properties, conservation of energy, work and power, fluid mechanics, stability and center of gravity, walking and running gait analysis. These topics are taught by quantitatively analyzing human movements through the use of modern biomechanical analyses including dynamometry, electromyography, accelerometry, and optical motion analysis. Prereq: BMS 507, BMS 508, KIN 652 or permission. KIN: Athletic Training major or permission.

KIN 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. Prereq: KIN 621; CHEM 404; KIN: Exercise Science majors. Special fee.

KIN 730 - Research Diving Techniques**Credits: 4**

Takes previously certified divers with the need to assist, or conduct research underwater, and trains them in the methods and specific techniques of scientific diving programs. Progressively builds upon the basic diving skills until the student is knowledgeable and competent. Culminates with a small research project formulated and implemented by the students. Prereq: SCUBA certification, department approval. Special fee. (Also offered as ZOO 730.)

KIN 731 - Inclusive Teaching Through Sport**Credits: 4**

This hybrid course examines the practical application of inclusion through Paralympic and adapted sports including wheelchair basketball, sitting volleyball, goalball, boccia, table-top games and "traditional" sports. In-class sessions will be held the first three weeks while an on-line/independent portion will be conducted the last two weeks of the course. A variety of sporting activities will be introduced that provide educators with the needed tools to develop and implement physical and recreational programs for all.

KIN 735 - Advanced Scuba**Credits: 4**

Classroom, pool, and open-water "hands-on" application in advanced diving techniques. The student's diving ability progresses to become safer and highly educated in a variety of diving disciplines. Topics covered are navigation, search and recovery, low visibility/night diving, surface supplied diving, boat diving, accident management hyperbaric medicine, and physiology and scientific research methods for divers. Special fee. Lab.

KIN 736 - Fitness and Graded Exercise Testing**Credits: 4**

Designed to provide students exposure to the knowledge and practical experience necessary for establishing exercise programs in apparently healthy populations. Topics include fitness testing, test interpretation, and exercise prescription. Prereq: KIN 704, KIN Exercise Science majors. Special fee.

KIN 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. Prereq: CHEM 404. KIN 621; KIN: Exercise Science majors.

KIN 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.

KIN 741 - 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.

KIN 742 - PE Practicum for Students with Disabilities**Credits: 4**

This experience is part of the required coursework for the Adapted Physical Education (PE/APE) certificate through the Graduate School. As a bi-weekly seminar intergrates the field experience with general physical education (GPE) and adapted physical education (PE/APE) concepts through class discussion, exercises, readings, and written assignments. The seminar format provides an opportunity for refinement and continued development of teacher skills and attributes for working with students with disabilities. Students learn to instruct effectively, to participate in the Individual Education Plan (IEP) process, and to manage their time.

KIN 743 - Sport Marketing**Credits: 4**

Survey of concepts and processes used in the successful marketing of sport programs and events. Special emphasis on the unique or unusual aspects of sport products, markets, and consumers. Prereq: MKTG 550 or permission.

KIN 761 - Senior Seminar Sport Studies**Credits: 4**

Discussions of sport studies topics, such as gambling, aggression, media, gender, race, class. Students consider different disciplinary approaches to these topics and develop projects to advance knowledge related to their interests. Prereq: KIN: Sport Studies majors; students must accumulate an aggregate total of 150 hours of work (paid or unpaid) in four approved sport organizations before they are allowed to register for KIN 761. Writing intensive.

Attributes: Writing Intensive Course

KIN 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 Sports 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. Prereq: KIN 565.

KIN 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. Prereq: PSYC 401 or KIN 671.

KIN 781 - Inclusion in Physical Education**Credits: 4**

Overview of special physical education. Addresses modifying instruction, expectations, and learning environment to accommodate physical and motor behaviors of students with disabilities. Lab. Writing intensive.

Attributes: Writing Intensive Course

KIN 782 - Therapeutic Applications of Adventure Programming**Credits: 4**

A study of theory, practice, and research of adventure experiences in therapeutic settings. Incorporates theoretical seminars and associated practical experiences. Prereq: KIN 787.

KIN 786 - Organization and Administration of Outdoor Education Programs**Credits: 4**

Study of administration of outdoor education programs using a variety of organizational models. Students use simulated exercises and work with outdoor agencies on special projects to learn the key factors necessary to manage a program. manage a program. KIN Outdoor Education majors. Special fee. Writing intensive.

Attributes: Writing Intensive Course

KIN 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. Prereq: KIN 704.

KIN 795 - Practicum in Cardiac Rehabilitation**Credits: 2**

Provides students with practical and theoretical experience in all aspects involving cardiac rehabilitation programs. Prereq: KIN 704, 794. Kin: Exercise Science majors only.

KIN 798 - Special Topics**Credits: 1-4**

New or specialized courses not normally covered in regular course offerings. May be repeated up to 8 credits. Prereq: departmental approval. Special fee on some sections.

Faculty

<http://chhs.unh.edu/our-faculty-and-staff-model-excellence>