

# 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/kin>

## Programs

- [Applied Human Anatomy & Physiology](#)
- [Coaching](#)
- [Exercise Science](#)
- [Health and Physical Education](#)
- [Health Sciences](#)
- [Kinesiology](#)
- [Sport Management and Leadership](#)

## Courses

### Exercise Science (EXSC)

#### 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-.

**Equivalent(s):** KIN 621

**Grade Mode:** Letter Grading

#### EXSC 650A - Internship in Exercise Science

**Credits:** 4-8

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. (IA continuous grading).

**Repeat Rule:** May be repeated for a maximum of 8 credits.

**Equivalent(s):** KIN 650A

**Grade Mode:** Credit/Fail Grading

#### EXSC 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 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.**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):** EXSC 621 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 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.

**Prerequisite(s):** EXSC 621 with a minimum grade of D- and EXSC 704 with a minimum grade of D-.**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 D- and EXSC 736 with a minimum grade of D-.**Equivalent(s):** KIN 737**Grade Mode:** Letter Grading**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- and EXSC 794 with a minimum grade of D-.

**Equivalent(s):** KIN 795

**Grade Mode:** Letter Grading

**Health and Physical Education (HPE)****HPE 500 - Introduction to Health and Physical Education****Credits:** 2

This course is intended to lay the foundation for future Health and PE pedagogy courses. Topics of discussion will include the role of health and physical education in today's society, "old" versus "new" physical education and philosophy of education and physical education. Also, wellness and health promotion, teaching health via a skills-base approach, outcomes and assessments, career and professional considerations of teaching and future trends within the profession.

**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 - Lifetime Sports****Credits:** 3

This course is designed to acquaint students with a variety of lifetime sports. The emphasis will be placed on students' ability to effectively participate in, teach and assess various activities. The following lifetime sports will be covered: cross country skiing, snowshoeing, badminton, pickle ball, tennis, fitness-related activities, weight training and golf.

**Equivalent(s):** KIN 601

**Grade Mode:** Letter Grading

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

This course is designed to expose students to the teaching of games through a tactical approach. This approach places a heavy emphasis on small-sided, modified games with subsequent question and answer sessions. The course will focus on instruction, game play, skill development, and analysis leading to playing competence and knowledge of teaching in soccer, ultimate Frisbee, basketball, handball, flag football, volleyball and softball.

**Equivalent(s):** KIN 603

**Grade Mode:** Letter Grading

**HPE 610 - Elementary Physical Education Pedagogy****Credits:** 4

This course is designed for future physical education teachers focusing primarily on "what" and "how" to teach elementary physical education. The class adopts a skill theme and movement concept approach to the curriculum. Teaching skills will be developed through readings, lecture/discussion, assignments, peer teaching and teaching children in the gymnasium.

**Equivalent(s):** KIN 610

**Grade Mode:** Letter Grading

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

This course provides the background information and skills teachers need to implement a health education program in schools at the grade levels in which they are certified. Aligned with the CDC Characteristics for Effective Health Education the course introduces the National Health Education Standards and prepares students in the development of teaching skills needed for implementing effective health education while including functional information based on local data and student need.

**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****Credits:** 4

This class examines motor development throughout the life-span utilizing an ecological perspective that incorporates the individual, the environmental conditions and the required tasks. The class is divided into 4 modules. Modules include the theoretical underpinnings of motor development, elements of fitness, assessment, and individual constraints. The class concludes with peer teaching episodes.

**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 educators an opportunity to observe, develop and practice teaching skills in the health classroom. Students are expected to accumulate 60 hours of observing, assisting and teaching experience in schools. In addition, weekly seminars integrate field experience with lesson planning, school wellness policies and the Whole School, Whole Community, Whole Child approach. This serves as an opportunity for refinement and continued development of teacher skills and attributes for teaching health education.

**Prerequisite(s):** HPE 648 with a minimum grade of D- and HPE 671 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 Sciences (HS)****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**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

**Kinesiology (KIN)****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 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.**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**Sport Management & Leadership (SML)****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:** 1-8

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. 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.

**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 as a sport marketer, and practical experience acting as a sport marketer. This course will instruct students on 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 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

## Faculty

[Kinesiology Department Faculty](#)