

KINESIOLOGY (KINS)

KINS 5000. Clinical Anatomy for Athletic Trainers. (4 Credits)

A cadaver anatomy course focusing on the extremities. Emphasis will be placed on the link between anatomical structure, orthopedic injuries, and clinical practice.

Enrollment Requirements: Open only to Athletic Training students.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205000>)

KINS 5099. Independent Study. (1-6 Credits)

May be repeated for a total of 36 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205099>)

KINS 5100. Musculoskeletal Examination and Acute Treatment I. (3 Credits)

Introduces the common types of orthopedic injuries and/or dysfunctions that occur to the lower extremities during physical activity and/or athletics. Injuries will be discussed from the following viewpoints: etiology and mechanism of injury; pathology; recognition and evaluation techniques; protocols; and prevention. Students will also learn to apply the techniques of orthopedic injury assessment and evaluation as well as the immediate care of those injuries.

Enrollment Requirements: KINS 5200.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205100>)

KINS 5101. Musculoskeletal Examination and Acute Treatment II. (4 Credits)

Introduces students to the common types of orthopedic injuries and/or dysfunctions that occur to the upper extremity during physical activity and/or athletics. Injuries will be discussed from the following viewpoints: etiology and mechanism of injury; pathology; recognition and evaluation techniques; protocols; and prevention. Students will also learn to apply the techniques of orthopedic injury assessment and evaluation as well as the immediate care of those injuries.

Enrollment Requirements: Must complete KINS 5100 with a C or better.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205101>)

KINS 5102. Therapeutic Interventions in Athletic Training I. (4 Credits)

An integrated approach to the treatment and rehabilitation of athletic injuries and conditions. Discusses the physiology and phases of healing with regards to specific types of tissue, various tissue responses to different types of training modalities, the theory behind common treatment modalities, and rehabilitation paradigms. Students will take an active role in learning to plan, implement, document, and evaluate the efficacy of therapeutic interventions in the treatment of physically active people with musculoskeletal injuries.

Enrollment Requirements: KINS 5100; PT 5410 and 5412.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205102>)

KINS 5103. Therapeutic Interventions in Athletic Training II. (3 Credits)

Prepares students to apply an integrated approach to the treatment and rehabilitation of athletic injuries and conditions. Students will take an active role in learning to plan, implement, document, and evaluate the efficacy of therapeutic interventions in the treatment of injured physically active people.

Enrollment Requirements: KINS 5102; PT 5410 and 5412.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205103>)

KINS 5106. Emergency Procedures in Athletic Training. (4 Credits)

Evaluation and treatment skills for athletic injuries to the head, face, neck, trunk, thorax, abdomen, and those caused by the environment. Acute first-aid considerations in life-threatening situations will also be covered in-depth.

Enrollment Requirements: Must possess CPR, AED, and first aid certification.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205106>)

KINS 5107. Orthopedic Assessment and Treatment of the Head and Spine. (4 Credits)

Covers anatomy, evaluation, pathology of spinal injuries and conditions, diagnosis, and management of injuries related to the head, spine, thorax, and core.

Enrollment Requirements: Instructor consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205107>)

KINS 5109. Medical Aspects and Pharmacology in Athletic Training. (4 Credits)

This course will prepare the athletic training student to recognize, evaluate, and manage common general medical conditions that may affect physically active individuals. Conditions that affect all of the major body systems will be discussed. Management of these conditions, which may include prescription or over the counter drugs will be discussed as well. Additionally, this course will provide athletic training students with information regarding the relationship between nutrition and physical fitness for the purpose of developing individualized nutrition plans for physical fitness and general well being.

Enrollment Requirements: Open to Athletic Training students.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205109>)

KINS 5110. Leadership, Administration, and Professional Development in Athletic Training. (2 Credits)

The course will cover concepts for student's majoring in athletic training regarding professional development and healthcare administration and organization. The lecture and discussion format of the course will include topics related to personnel management, leadership, daily operations, finance, facility design, information management, workshop development, interviewing skills, ethics and ethical decision-making, organizational structure, work-place culture, among other topics that pertain to the profession of athletic training.

Enrollment Requirements: Instructor consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205110>)

KINS 5111. Practical Applications of Injury Assessment and Care. (3 Credits)

Provides students an opportunity to solidify, improve upon and refine assessment skills, treatment plans and rehabilitation prescription. Students' ability to provide proper documentation utilizing a written SOAP note, including differential diagnoses as well as immediate treatment and short and long-term rehabilitation plans will be assessed throughout the semester. A comprehensive review of content in preparation for the Board Examination will also be done throughout the course.

Enrollment Requirements: Open only to M.S. Athletic Training students.

May be repeated for a total of 3 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205111>)

KINS 5112. Behavioral Health Considerations for Athletic Trainers. (3 Credits)

Prepares students to recognize clients/patients exhibiting abnormal social, emotional, and mental behaviors. Coupled with recognition is the ability to intervene and refer these individuals as necessary. Students learn to appreciate the role of mental health in injury and recovery and use interventions to optimize the connection between mental health and restoration of participation.

Enrollment Requirements: Instructor consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205112>)

KINS 5115. Therapeutic Interventions III. (2 Credits)

This course is designed to prepare the entry-level athletic trainer to be versed in strength and conditioning principles and exercise as a means to help prevent and rehabilitate musculoskeletal injuries. Students will learn the physiology behind muscle and bone development related to exercise and strength training and will learn to design targeted strength training programs to treat abnormalities after injury and to optimize performance.

Enrollment Requirements: KINS 5103; open to M.S. in Athletic Training students.

May be repeated for a total of 2 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205115>)

KINS 5200. Foundations of Athletic Training. (2 Credits)

To provide students with an overview of the general concepts and principles related to the profession of athletic training.

Enrollment Requirements: Open only to Athletic Training students.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205200>)

KINS 5201. Athletic Training Experience I. (2 Credits)

In this practicum experience the student works directly with a certified athletic trainer and is assigned to a specific athletic training practice setting. It involves providing day-to-day care for the participants, as well as administering treatments and rehabilitation under supervision of the preceptor.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205201>)

KINS 5202. Athletic Training Clinical Experience II. (3 Credits)

Students work directly with a certified athletic trainer and are assigned to a specific athletic training practice setting. Involves providing day-to-day care for the participants, as well as administering treatments and rehabilitation under supervision of the preceptor. Students will be expected to be immersed daily into the role of the athletic trainer.

Enrollment Requirements: KINS 5201.

May be repeated for a total of 3 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205202>)

KINS 5203. Athletic Training Clinical Experience. (1 Credit)

In this elective practicum experience, the student works directly with a certified athletic trainer serving as the clinical preceptor and is assigned to a specific athletic training practice setting. This experience involves providing day-to-day care for the participants, as well as administering treatments and rehabilitation under the supervision of the clinical preceptor.

Enrollment Requirements: Instructor consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205203>)

KINS 5204. Clinical Immersion II. (3 Credits)

In this practicum course, students work directly with a certified athletic trainer and is assigned to a specific athletic training practice setting. Involves providing day-to-day care for the participants, as well as administering treatments and rehabilitation under supervision of the preceptor. Students will be expected to be immersed daily into the role of the athletic trainer.

Enrollment Requirements: KINS 5202; Open only to M.S. Athletic Training students.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205204>)

KINS 5205. Athletic Training Clinical Immersion II. (5 Credits)

Students work directly with a certified athletic trainer and is assigned to a specific athletic training practice setting. Involves providing day-to-day care for the participants, as well as administering treatments and rehabilitation under supervision of the preceptor. Students will be expected to be immersed daily into the role of the athletic trainer.

Enrollment Requirements: KINS 5204; Open only to M.S. Athletic Training students..

May be repeated for a total of 5 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205205>)

KINS 5206. Athletic Training Clinical Experience. (1 Credit)

In this elective practicum experience, the student works directly with a certified athletic trainer serving as the clinical preceptor and is assigned to a specific athletic training practice setting. This experience involves providing day-to-day care for the participants, as well as administering treatments and rehabilitation under the supervision of the clinical preceptor. Students taking this course will be assigned a grade of S (satisfactory) or U (unsatisfactory).

Enrollment Requirements: KINS 5202 and instructor consent. Not open to M.S. in Athletic Training majors.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205206>)

KINS 5220. Exercise and Sport Psychology. (3 Credits)

The course will examine psychological factors associated with participation and performance in sport and physical activity. The purpose of the course is to provide an overview of psychological principles, motivators, barriers to, and theories that influence physical activity and sport.

Enrollment Requirements: Instructor consent. Recommended preparation: KINS 5507.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205220>)

KINS 5222. Mental Health Considerations in Exercise and Sport. (3 Credits)

The course will examine mental health considerations in sport and exercise. The course will closely examine the impact that exercise and sport performance can have on the individual and athlete's mind and body as they devote time, energy, and effort into their sport. Engaging in sport individuals and athletes navigate unique stressors and can be at greater risk compared to the general population to experience a negative impact on their mental health and well-being. Topics to be covered may include athlete identity, mental health stigmas, personality disorders, disordered eating, substance abuse, sports specialization, and other psychiatric disorders.

Enrollment Requirements: Instructor consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205222>)

KINS 5223. Lifestyle Medicine. (3 Credits)

This course provides an in-depth exploration of lifestyle medicine, emphasizing the role of lifestyle choices in health and the prevention and management of chronic diseases and health conditions.

KINS 5223 covers topics related to physical activity, nutrition, stress management, chronic disease, and health promotion, and the role of social determinants of health on these health behaviors.

Enrollment Requirements: Instructor consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205223>)

KINS 5500. Research Techniques and Experimental Designs in Exercise Science. (3 Credits)

Gives an understanding of research designs and methods in exercise science when examining different research topics related to human, animal and cell culture models.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205500>)

KINS 5507. Fundamentals of Exercise Prescription. (3 Credits)

An examination and application of the principles of exercise prescription in primary disease prevention. Students will advance their knowledge in the exercise pre-participation health screening and pre-exercise evaluation processes. Students will develop exercise prescriptions for healthy adults and adults with multiple cardiovascular disease risk factors and/or special considerations. Student will learn how to adjust an exercise prescription for clients taking common medications that affect the exercise response and learn behavioral strategies to improve exercise adherence.

Enrollment Requirements: Recommended preparation: An undergraduate course in exercise prescription and/or exercise science/kinesiology.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205507>)

KINS 5508. Exercise Prescription for Individuals with Chronic Diseases and Health Conditions. (3 Credits)

Taught online. An in-depth examination and application of the principles of exercise prescription for individuals living with chronic diseases and health conditions. Students will advance their knowledge in prescribing exercise for special populations that include groups with cancer, cardiovascular, pulmonary, metabolic, neuromuscular, and musculoskeletal diseases and conditions across the lifespan, among others.

Enrollment Requirements: KINS 5507, 5594 and instructor consent required.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205508>)

KINS 5509. Clinical Exercise Physiology. (3 Credits)

Designed to provide students with a strong foundation in clinical exercise physiology. An understanding of how the body responds to acute and chronic exercise is crucial for clinical exercise physiologists. Emphasis is placed on pathophysiology, clinical exercise testing, disease management and the acute and chronic effects of exercise on cardiovascular, pulmonary, and metabolic disease among other diseases and chronic conditions. Students will: 1) participate in HuskyCT discussions on topics presented in class; 2) participate in case studies in HuskyCT discussion format involving exercise testing and performance; and 3) complete examinations to demonstrate their competency of course objectives.

Enrollment Requirements: KINS 5507 and instructor consent. Recommended preparation: Human anatomy and physiology.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205509>)

KINS 5511. Sitting is the New Smoking. (3 Credits)

Addresses concepts related to how appropriate movement and posture can promote a lifetime of physical activity and optimal joint health. The course will integrate foundational concepts with current literature related to joint injury. Strongly recommended for all clinicians in athletic training, physical therapy, and sport performance fields.

Enrollment Requirements: KINS 5507 and instructor consent.

Recommended preparation: Human anatomy and physiology.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205511>)

KINS 5512. Preventing Sudden Death in Sport. (3 Credits)

Provides an in-depth examination of the causes of sudden death in the athletic/exercise environment. The most current evidence-based guidelines pertaining to the prevention, recognition, and treatment of these conditions will be explored and discussed.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205512>)

KINS 5514. Legal Considerations of Sudden Death in Sport--Issues for Medical Staff and Athletic Administrators. (3 Credits)

A seminar for Kinesiology graduate students using formal instruction regarding legal aspects of sudden death in sport. Covers sport law concepts drawing upon the case law of recent incidents of sudden death in sport to explore the various criminal and civil legal ramifications that arise when preventable deaths occur in domain of organized sport and physical activity.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205514>)

KINS 5515. Scientific Presentations. (3 Credits)

Skills required for writing scientific articles and abstracts, reviewing manuscripts, and presenting results at scientific meetings.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205515>)

KINS 5522. Scientific Instrumentation in Human Movement. (3 Credits)

A course for graduate exercise science students focusing on the assessment of human movement using advanced instrumentation for data collection within both clinical and research contexts. Students will acquire skills in motion capture technology, transcranial magnetic stimulation, isokinetic testing, electromyography, quantitative sensory testing, and diagnostic ultrasound. Applications will consider diverse patient/client populations.

Enrollment Requirements: Open to graduate students in Kinesiology; others by departmental consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205522>)

KINS 5530. Physiology of Stressful Environments. (3 Credits)

Exercising and resting responses/adaptations/illnesses to high altitude, cold, hyperbaric, polluted, and zero gravity environments. The acute and chronic effects of electromagnetic radiation fields and sleep deprivation will also be studied.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205530>)

KINS 5533. Current Research and Issues in Athletic Training. (3 Credits)

Acquaints students of athletic training with the recent research in the field, the components of conducting and publishing research in this field, and preparation for research endeavors at the graduate level. Covers relevant issues, policies, and laws related to athletic training that are currently being regionally or nationally debated, discussed, and/or implemented.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205533>)

KINS 5594. Fundamentals of Conducting Systematic Reviews. (3 Credits)

An application of the best practices for conducting scientific systematic review on a topic related to the use of exercise/physical activity as medicine. Students will advance their knowledge in systematically searching the literature with a medical librarian, triaging potentially qualifying studies, data extraction and coding, synthesizing data and critiquing the literature, and writing scientifically. KINS 5594 is a prerequisite for KINS 5508 Exercise Prescription for Chronic Diseases and Health Conditions.

Enrollment Requirements: KINS 5507 and instructor consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205594>)

KINS 5595. Special Topics in Exercise Prescription. (3 Credits)

Taught online. An in-depth examination and application of the principles of exercise prescription for healthy populations with special considerations, and unique circumstances under which people exercise related to both athletic and clinical populations. Students will advance their knowledge in prescribing exercise for healthy populations with special populations such as children and older adults, populations with unique considerations such as the spinal cord injured and amputee athletes, and unique exercise circumstances such as environmental considerations and wearable technologies, among others.

Enrollment Requirements: KINS 5507.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205595>)

KINS 5596. Capstone in Exercise Prescription. (3 Credits)

Capstone course for the M.S. in Exercise Prescription Professional Degree Program. The application of best practices for conducting and writing scientific systematic reviews and preparing and delivering an online educational presentation of a scientific systematic review on a topic related to the use of exercise/physical activity as medicine. Students will advance their knowledge in the use of exercise/physical activity as medicine for healthy adults, healthy populations with special considerations, populations with chronic diseases and health conditions, and unique special considerations in exercise prescription.

Enrollment Requirements: KINS 5507, 5508, 5509, 5510, 5594, 5595 and instructor consent required.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%205596>)

KINS 6094. Seminar. (1-6 Credits)

Cooperative study of developments and problems in the student's area of specialization.

May be repeated for a total of 12 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%206094>)

KINS 6100. Data Analysis and Reporting in Kinesiology. (3 Credits)

Analyzes data and critically appraises research literature using a broad variety of methods applicable to laboratory and clinical research. Students will gain experience using software to analyze data germane to exercise kinesiology and report results in a manner consistent with leading journals in the field. Knowledge of basic statistical principles is assumed.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%206100>)

KINS 6106. Qualitative Research Methods. (3 Credits)

The role of qualitative research in healthcare and exercise science. Examines major approaches used in conducting qualitative research and the application of these methods to problems and phenomena in healthcare and athletic training. Emphasizes the developmental process prior to collection, collection, management, analysis, and interpretation of qualitative data. Exploration and application of topics such as sampling, interviewing and observation techniques, data analysis methods, and reporting of qualitative research. Examines evaluation and critique of research studies utilizing qualitative methods.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%206106>)

KINS 6425. Special Topics in Health and Wellness Across the Lifespan. (3 Credits)

An in-depth examination of health issues across the lifespan. Perspectives from social and behavioral health science, occupational and environmental health science, and/or public health policy.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%206425>)

KINS 6500. Exertional Heat Stroke. (3 Credits)

An in-depth examination of pathophysiology, prevention, recognition, treatment, and return to play considerations for exertional heat stroke, with a secondary emphasis on all exertional heat illnesses.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%206500>)

KINS 6520. Thermal Physiology. (3 Credits)

Detrimental effects which exercise in the heat and dehydration have on: cardiovascular function, strength, endurance, fluid-electrolyte balance, disposition, and heat tolerance.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%206520>)

KINS 6525. Muscle Physiology in Exercise and Sport. (3 Credits)

Structural, morphological and biochemical changes in muscle with exercise and training.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=KINS%206525>)