

Kinesiology/Integrative Exercise Physiology, M.S.

COLLEGE OF PUBLIC HEALTH (<http://cph.temple.edu>)

About the Program

Integrative exercise physiology is a subdiscipline of human physiology that focuses on cardiovascular, metabolic, and neuromuscular responses and adaptations to physical activity. Researchers in the field examine how these body systems coordinate to achieve human movement, and how the movement stimulates the body's adaptive processes in these systems.

The Master of Science in Kinesiology with a concentration in Integrative Exercise Physiology trains students in pragmatic understandings of the field of exercise physiology, including in clinical, sport, and research settings. Students learn to develop and implement research-informed training programs and exercise prescriptions in order to promote and improve physical fitness and health in individuals. A strong foundation in biomedical research prepares future researchers and trains future health professionals to employ evidence-based practices in their work. It is these strengths that set Temple University's Integrative Exercise Physiology program apart:

- Renowned faculty, who are internationally recognized experts in their fields.
- Strong research activity, which ensures that graduates of the program are optimally prepared for future research-based academic training and careers in healthcare industries.
- A dynamic urban environment, which provides students with a wide range of opportunities for internships and practical experience in top-tier healthcare systems and rehabilitation centers across the Philadelphia region.
- An interdisciplinary approach to learning, which engages students with faculty and scholars across many disciplines, including athletic training, nursing, physical therapy, and public health, as well as facilitates inter-professional collaboration.

Time Limit for Degree Completion: 4 years, but students typically complete the program in 2 years.

Campus Location: Main, with classes occasionally offered at Fort Washington. Electives are also offered at the Center City, Ambler, and Health Sciences Center campuses.

Full-Time/Part-Time Status: Students are strongly encouraged to complete coursework on a full-time basis.

Interdisciplinary Study: Interdisciplinary study is available within the department and through other departments in the University.

Areas of Specialization: This degree is offered by the Department of Kinesiology in Temple University's College of Public Health. Faculty research emphases within the department include:

- adaptation of tissues to stress and overuse;
- biomarkers associated with sub-concussive cerebrovascular injury;
- exercise addiction;
- human balance and locomotion;
- molecular and cellular mechanisms of cardiovascular and muscle adaptation to exercise;
- neural mechanisms of muscle coordination in human upper extremities;
- sensorimotor, perceptual, and psychological influences on human movement control; and
- sport-related concussion.

Job Prospects: Many graduates of the program apply to research-intensive doctoral programs, such as the Ph.D. in Kinesiology with a concentration in Integrative Exercise Physiology, and ultimately become exercise scientists and clinical researchers. Students interested in clinical practice can pursue careers as clinical exercise physiologists who conduct assessments of patients' cardiovascular, pulmonary, and skeletal muscle systems. Exercise physiologists may work in hospitals and rehabilitation centers as part of a healthcare team, with their work contributing to the identification of disease. Graduates can also pursue roles as personal trainers who work with clients to ensure that they exercise in the most effective and safe ways.

Non-Matriculated Student Policy: Non-matriculated students are welcome to take classes in the department, assuming they have the requisite knowledge to be successful in the coursework.

Financing Opportunities: Assistantship duties include, but are not limited to, teaching activity courses in a variety of movement forms and sports; teaching laboratory sections of undergraduate courses such as Biomechanics, Human Anatomy and Physiology, and Physiology of Exercise; serving as a research assistant in a research laboratory; or acting as an administrative assistant to a department administrator.

Admission Requirements and Deadlines

Application Deadline:

Fall: March 1

All applicants to the M.S. in Kinesiology with a concentration in Integrative Exercise Physiology must apply via the Centralized Application Service for Public Health (SOPHAS). The system can be accessed at <https://sophas.liaisoncas.com/>.

Letters of Reference:

Number Required: 3

From Whom: Letters should be obtained from college/university faculty or an immediate work supervisor who can provide insight into your abilities and talents, as well as comment on your aptitude for graduate study.

Coursework Required for Admission Consideration: An academic background in biological sciences, exercise science, kinesiology, or physical education is preferred.

Bachelor's Degree in Discipline/Related Discipline: All applicants must have a bachelor's degree with a minimum cumulative GPA of 3.0.

Statement of Goals: A statement of one to two pages should be clearly written.

Standardized Test Scores:

GRE/MAT: Required. The GRE score must total a minimum of 300 combined on the verbal and quantitative sections. Official GRE scores should be sent to SOPHAS (<https://sophas.liaisoncas.com/applicant-ux>) using code 0151.

TOEFL: For applicants whose native language is not English, the TOEFL is required with a minimum score of 79 on the iBT. These scores should be sent officially to SOPHAS (<https://sophas.liaisoncas.com/applicant-ux>) using the SOPHAS-specific TOEFL code of 5688.

Clearances: Students in the Integrative Exercise Physiology M.S. concentration in Kinesiology have the option to complete clinical/field education experiences at facilities both on and off Temple University's campuses. These placements may require criminal background checks, Act 33/34 clearances, and perhaps a drug screen. Many may also require students to have personal health insurance. Not meeting these requirements may limit and potentially eliminate placement options for the student, thus resulting in her/his inability to meet graduation requirements. The College cannot ensure clinical field placements if the individual fails to meet the requirements or maintain health insurance. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent the individual from becoming credentialed and/or licensed to practice.

Interview: An interview may be required.

Resume: Current resume required.

Transfer Credit: Relevant graduate courses taken at other accredited universities may be considered for transfer credit to the student's program. The maximum number of credits a student may transfer is 6.

Program Requirements

General Program Requirements:

Number of Credits Required to Earn the Degree: 30

Required Courses:

Code	Title	Credit Hours
College Core Course		
HRPR 5001	Current and Emerging Issues in Public Health and Health Professions	0
Core Courses		
KINS 5311	Physiology of Exercise	3
KINS 9201	Cardiovascular Exercise Physiology	3
KINS 9203	Appl Ex Physio-Neuromusc	3
KINS 9901	Research Methods in Kinesiology	3
Intermediate Statistics course		3
Electives		9
Select three courses from the following:		
BIOL 5111	Genomics in Medicine	
KINS 5202	Biomechanical Skeletal Tissue	
KINS 5312	Exercise and Nutrient Metabolism	
KINS 5313	Exercise and Aging	
KINS 8349	Cadaver Anatomy	

KINS 9204	Cellular Adapt to Exer	
Other KINS electives or graduate courses in other departments ¹		
Culminating Experience Courses ²		6
Total Credit Hours		30

¹ Electives may be taken to tailor graduate coursework to the interests and skills of the student. Approval of the faculty advisor is required to select an elective course.

² Students choose from among three options to complete the degree: a thesis, a master's research project, or a clinical practicum. Each option requires the completion of 6 credits, as explained in the section below.

Culminating Events:

Thesis Option:

The thesis is designed to demonstrate the student's ability to collect data and present results in a scholarly manner. KINS 9995 Master's Research in Kinesiology is taken for 3 credits, as is KINS 9996 Master's Thesis in Kinesiology. Students schedule a defense with their three-person committee after the thesis advisor has approved the thesis as ready for defense. Overall evaluation is pass/fail, with recommendations for improvements of the thesis offered as a result of faculty review and discussion at the thesis defense.

Master's Research Project Option:

The master's research project option is a mentored research experience that may result in a publication or a summary document of the research experience. Taken for 3 credits, KINS 9995 Master's Research in Kinesiology is designed to offer flexibility for students who wish to be actively involved with research, but do not want to engage in research at the level expected for a thesis. Evaluation of the project is by a two-person committee as pass/fail. To earn the 3 other required credits, students in the master's research project option take an additional elective.

Clinical Practicum Option:

KINS 9785 Internship in Kinesiology is a 300-hour (6 credits) supervised applied experience. The clinical practicum offers students the opportunity to engage in more applied work. Evaluation of the experience is by the major professor, based on a submitted portfolio of materials completed during the experience.

Contacts

Program Web Address:

<https://cph.temple.edu/kinesiology/programs-offered/graduate/Integrative-exercise-physiology>

Department Information:

Dept. of Kinesiology
230 Pearson Hall
1800 N. Broad Street
Philadelphia, PA 19121-3302
rtierney@temple.edu
215-204-8707

Submission Address for Application Materials:

<https://sophas.liaisoncas.com/>

Department Contacts:

Admissions:

CPH Office of Admissions
cph@temple.edu
215-204-5200

Academic Coordinator:

Joseph Hines
tua47376@temple.edu
215-204-6204

Graduate Program Director:

Ryan Tierney, Ph.D.
rtierney@temple.edu
215-204-4001

Courses

KINS 5141. Anatomy for Orthopedic Assessment. 1 Credit Hour.

This 1 credit hour course will focus on pertinent anatomical landmark identification and palpation for clinical evaluation of athletic injuries and conditions.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 5142. Foundations of Athletic Training. 4 Credit Hours.

Through lecture and laboratory exercises, the student will obtain both didactic information and practical application of athletic training skills, including basic taping and bracing techniques, acute and emergency management, stretching, and equipment fitting and removal. Additionally, legal and ethical issues will be addressed.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 5143. Orthopedic Assessment I. 3 Credit Hours.

This required course will focus on the key concepts of evaluation, diagnosis, and management of lower extremity sports-related injuries. Students will be able to use an evidence-based approach to identify, explain, and assess pathologies of musculoskeletal injuries in the lower extremity and apply these concepts in real-life athletic training scenarios.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 5202. Biomechanical Skeletal Tissue. 3 Credit Hours.

This course offers an in-depth examination of the structure, composition, and material behavior of the basic skeletal tissues, including bone, cartilage, tendon, ligament, and muscle. The pathomechanics of injury, adaptation to loading, and degenerative changes associated with aging are analyzed.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 5237. Racial Minorities and Sport. 3 Credit Hours.

This dual-level course focuses on the positions and roles of African American and other persons of color in American sport. Topics to be covered assist in consciousness raising of both white students and students of color to the unique experiences and challenges of racial minority participants in sport.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 5239. Self-Development and Sport. 3 Credit Hours.

This group process experiential course focuses the student's attention on the patterns and practices of her/his own sport or exercise. Assessments of satisfaction and areas for change are followed by action plan development for future experiences.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 5244. Orthopedic Assessment II. 3 Credit Hours.

This is a required three credit hour course that will focus on the key concepts of evaluation, diagnosis, and management of upper-extremity and axial skeleton sports-related injuries. Students will be able to use an evidence-based approach to identify, explain, and assess pathologies of musculoskeletal injuries in the upper extremity and axial skeleton and apply these concepts in real-life scenarios.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 5143|Minimum Grade of B|May not be taken concurrently.

KINS 5245. General Medical Conditions in Athletic Training. 3 Credit Hours.

This course will focus on the key concepts of evaluation, diagnosis, and management of general medical conditions commonly seen in the athlete. Students will be able to use an evidence-based approach to identify, explain, and assess pathologies and apply these concepts in real-life scenarios.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Co-requisites: KINS 5246.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 5142|Minimum Grade of B|May not be taken concurrently.

KINS 5246. General Medical Conditions in Athletic Training Laboratory. 1 Credit Hour.

This course will focus on the practical application of diagnostic and assessment techniques for general medical conditions. Students will use auscultation, palpation, urinalysis, diabetic screening tools, anthropometric measurements, and otoscopes and ophthalmoscopes and calculate reliability among groups.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Co-requisites: KINS 5245.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 5142|Minimum Grade of B|May not be taken concurrently.

KINS 5247. Leadership for the Entry-Level Athletic Trainer. 1 Credit Hour.

This 1 credit hour course will focus on the history of athletic training and its continued growth as a healthcare profession. Students will determine their leadership style and practice conflict resolution skills.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Master of Sci in Athlctic Train.

Repeatability: This course may not be repeated for additional credits.

KINS 5287. Practicum in Athletic Training I. 3 Credit Hours.

This course accompanies the first of four clinical experiences in the athletic training curriculum in order to further develop and enhance the practical skills and knowledge necessary for clinical practice. Students will review and demonstrate lower extremity injury evaluations, foundational athletic training skills, and emergency management techniques.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

(KINS 5142|Minimum Grade of B|May not be taken concurrently)

AND (KINS 5143|Minimum Grade of B|May not be taken concurrently)

KINS 5311. Physiology of Exercise. 3 Credit Hours.

This course is a survey of the broad spectrum of exercise physiology. The physiology concepts presented are applied to research, rehabilitation, preventive medicine, and coaching. Such topics as nutrition and performance, weight control, stress testing, and ergogenic aids are discussed in detail. Basic laboratory techniques and classical experiments are demonstrated.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 5312. Exercise and Nutrient Metabolism. 3 Credit Hours.

The scientific principles controlling the relationship between exercise, nutrition, and weight control are examined. Special emphasis is directed toward the practical application of these principles for the development of individualized weight control programs.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 5313. Exercise and Aging. 3 Credit Hours.

This course offers a study of the potential influence of exercise on the aging process. The scientific principles that govern aging processes and the influences of exercise on these processes are reviewed as well as the development of exercise programs for geriatric populations.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 5441. Therapeutic Modalities in Athletic Training. 4 Credit Hours.

Through lecture and laboratory exercises, the student will be able to identify indications and contraindications, appropriately apply, and utilize therapeutic guidelines for thermal, electrical and mechanical agents used in the management of athletic injuries. Upon completion of the 4-credit course, students will be able to use an evidence-based approach to create a successful therapeutic modality program for an injured physically active individual.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Master of Sci in Athltic Train.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 5244|Minimum Grade of B|May not be taken concurrently.

KINS 5442. Therapeutic Exercise in Athletic Training. 4 Credit Hours.

Through lecture and laboratory exercise, the student will summarize the injury process, discuss current surgical techniques and utilize various rehabilitation exercises to ensure a safe return to activity. Upon completion of this 4-credit course, students will be able to use an evidence-based approach to create a successful rehabilitation program for an injured physically active individual.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Master of Sci in Athltic Train.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 5244|Minimum Grade of B|May not be taken concurrently.

KINS 5443. Organization and Administration in Athletic Training. 3 Credit Hours.

This three-credit hour lecture/seminar course will focus on the aspects of professional management and administrative issues in athletic training, including program management, human resources, insurance, risk management, ethics, pre-participation examinations and facility design.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 5247|Minimum Grade of B|May not be taken concurrently.

KINS 5487. Practicum in Athletic Training II. 3 Credit Hours.

This 3-credit course is designed to accompany the second of four clinical experiences in the athletic training curriculum to further develop and enhance the practical skills and knowledge necessary for clinical practice. Students will review and demonstrate upper extremity and postural evaluations, general medical assessments, and leadership skills.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Master of Sci in Athltic Train.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

(KINS 5244|Minimum Grade of B|May not be taken concurrently)

AND (KINS 5245|Minimum Grade of B|May not be taken concurrently)

AND (KINS 5246|Minimum Grade of B|May not be taken concurrently)

AND (KINS 5287|Minimum Grade of B|May not be taken concurrently)

KINS 5644. Applied Research in Athletic Training. 3 Credit Hours.

This three-credit course will introduce the fundamentals of research design and interpretation, including basic statistical analysis. Students will read, summarize, and interpret current literature related to athletic training and determine how it applies to clinical practice.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 5487|Minimum Grade of B|May not be taken concurrently.

KINS 5645. Board of Certification Examination Preparation. 2 Credit Hours.

This 2-credit course will focus on the directed study for the Board of Certification (BOC) examination. Through the use of self-assessments, students will identify areas of strengths and weaknesses, create tailored study plans, and complete practice examinations.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

(KINS 5487|Minimum Grade of B|May not be taken concurrently)

AND (KINS 5441|Minimum Grade of B|May not be taken concurrently)

AND (KINS 5442|Minimum Grade of B|May not be taken concurrently)

KINS 5687. Practicum in Athletic Training III. 3 Credit Hours.

This three-credit course is designed to accompany the third of four clinical experiences in the athletic training curriculum to further develop and enhance the practical skills and knowledge necessary for clinical practice. Students will review and demonstrate therapeutic exercise and modality applications.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

(KINS 5487|Minimum Grade of B|May not be taken concurrently)

AND (KINS 5441|Minimum Grade of B|May not be taken concurrently)

AND (KINS 5442|Minimum Grade of B|May not be taken concurrently)

KINS 5808. Advanced Sport Concussion. 3 Credit Hours.

This online course is designed to provide students information about sport concussion. It is geared towards graduate students seeking to augment their concussion education. It is open to all students, but also serves to supplement specific student learning objectives for graduate Athletic Training Education students. This course will be cross-listed with an approved undergraduate course KINS 4808 Sport Concussion. Graduate students will receive targeted course lectures, readings, and online resources on topics such as concussion pathomechanics, pathophysiology, recognition, assessment, management, and return to play guidelines.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 5851. Current Trends in Athletic Training. 3 Credit Hours.

Through the use of current literature and content experts in the field, this three-credit course will provide advanced information regarding clinically relevant topics related to athletic training and sports medicine practice.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 5443|Minimum Grade of B|May not be taken concurrently.

KINS 5852. Transition to Athletic Training Clinical Practice. 3 Credit Hours.

This three-credit course will serve as the students' capstone experience and focus on preparing students to transition from the classroom to clinical practice. Students will submit a portfolio that includes completed competencies, resume, cover letter, and professional development units.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 5645|Minimum Grade of B|May not be taken concurrently.

KINS 5987. Practicum in Athletic Training IV. 3 Credit Hours.

This three-credit course is designed to accompany the final of four clinical experiences in the athletic training curriculum to further develop and enhance the practical skills and knowledge necessary for clinical practice. Students will review and demonstrate organization and administration principles and applied research skills.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

(KINS 5443|Minimum Grade of B|May not be taken concurrently)

AND (KINS 5644|Minimum Grade of B|May not be taken concurrently)

AND (KINS 5687|Minimum Grade of B|May not be taken concurrently)

KINS 8101. Creative Approaches to Teaching Physical Education. 3 Credit Hours.

This course is for elementary and secondary physical education teachers. It focuses on fostering creative behavior in learners; developing an understanding of creativity and the creative person; and demonstrating the links between creative learner behavior and the teaching behavior with which it is associated. Participants practice and receive feedback about their teaching behavior.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 8300. Seminar in Athletic Training/Sport Medicine. 1 to 3 Credit Hour.

This course is designed to provide the student with analytical skills and practical experiences relative to research as it applies to sports-related injuries.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

KINS 8343. Orthopedics in Athletic Training/Sports Medicine. 3 Credit Hours.

This course deals with the theories and methods of orthopedic medicine as they are specifically applied to the understanding, evaluation, treatment, and rehabilitation of sports-related injuries. Course content includes general principles related to the evaluation of orthopedic and sports injury. Current theory and research related to the assessment of athletic injuries are presented.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 8344. Rehabilitation Methods and Techniques for Sports-Related Injuries. 3 Credit Hours.

This course is designed to provide the student with both the theoretical cases and some practical experience relative to rehabilitation therapy as it applies to sports-related injuries. Topics to be covered include manual muscle testing, goniometry, theories of pain and its management, and various therapeutic exercise modalities.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 8348. Lab Tech in Ath Train. 3 Credit Hours.

This is a 3-credit course specifically designed for students currently enrolled in the graduate Athletic Training program. This course will provide students with knowledge and application of selected laboratory instrumentation utilized in the athletic training division of the Biokinetics Research Laboratory. Topics include, but are not limited to, instrumentation used in testing of the following areas: pain threshold, strength, motion analysis, electromyography, postural control, and protein assays.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 8349. Cadaver Anatomy. 3 Credit Hours.

This course is designed for students currently enrolled in the graduate Athletic Training Education program. The course will provide students with knowledge and application of gross human anatomy, injury pathomechanics, and evaluation. Topics include, but are not limited to, laboratory experiences in the following areas: skeletal, muscular, nervous, cardiovascular, and respiratory systems.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 8500. Symposium in Kinesiology. 3 Credit Hours.

This course provides an opportunity for an in-depth examination of a special topic of interest, generally in a smaller class setting.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

KINS 8601. Research Appraisal and Clinical Application. 3 Credit Hours.

This 3-credit hour online course will focus on critically reading current research related to the field of athletic training. Students will learn common research design and statistical methods, and be able to critically appraise current literature. Students will be able to identify and analyze trends in clinical practice with the goal of improving patient outcomes. This course will prepare students for their capstone experience.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Doctor of Athletic Training.

Repeatability: This course may not be repeated for additional credits.

KINS 8602. Clinical Grand Rounds I: Lower Extremity. 3 Credit Hours.

This online course will consist of clinical cases from the students and guest lecturers in the medical field, including the current athletic training medical director. An evidence-based approach will be utilized to determine best practices and ways to improve patient outcomes for lower-extremity athletic injuries.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

College Restrictions: Must be enrolled in one of the following Colleges: College of Public Health.

Repeatability: This course may not be repeated for additional credits.

KINS 8603. Clinical Grand Rounds II: Upper Extremity. 3 Credit Hours.

This online course will consist of clinical cases from the students and guest lecturers in the medical field, including the current athletic training medical director. An evidence-based approach will be utilized to determine best practices and ways to improve patient outcomes for upper extremity athletic injuries.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 8602|Minimum Grade of B|May not be taken concurrently.

KINS 8604. Evidence Based Decision Making in Athletic Training. 3 Credit Hours.

This 3 credit hour online course will consist of defining evidence-based practice, including concepts of reliability, accuracy, predictive validity of clinical procedures, and outcome measures. Students will have the opportunity to apply evidence-based decisions to case-based scenarios, and critically evaluate decisions of peers. Students will be required to create an online clinical evidence-based continuing education course proposal according to the Board of Certification guidelines.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Doctor of Athletic Training.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 8601|Minimum Grade of B|May not be taken concurrently.

KINS 8611. Leadership and Cultural Considerations in Athletic Training. 3 Credit Hours.

This 3 credit hour online course is an interdisciplinary course that utilizes case scenarios to discuss issues involving leadership, cultural competence, and ethical decision-making by health care team members.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9102. Measurement and Evaluation in Physical Education. 3 Credit Hours.

This course investigates psychometrics as they apply to kinesiology. Assessment's role within education is explored, and technology's impact on measurement and evaluation is examined. Psychomotor, cognitive, and affective domains serve as the basis for constructing instruments and tests.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9103. Analytic Study of Teaching. 3 Credit Hours.

This course offers systematic study of the teaching process and environments for learning in order to analyze students' own teacher behavior. Information from research on teaching in the psychomotor, cognitive, and affective domains is introduced to support these conceptual frameworks.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9104. Curriculum in Physical Education. 3 Credit Hours.

This course examines the meaning and purpose of curriculum, its components and levels, and basic curriculum writing skills. Emphasis is placed on examining the scope and sequence of various organizing centers such as sport, fitness, movement, dance, aquatics, adventure, personal protection, and social skill.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9201. Cardiovascular Exercise Physiology. 3 Credit Hours.

This is a comprehensive cardiovascular exercise physiology course that emphasizes the mechanisms of regulatory function of the cardiovascular system during acute physical activity and the mechanisms of the adaptive response to exercise training.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9203. Appl Ex Physio-Neuromusc. 3 Credit Hours.

Principles of neurophysiological regulatory mechanisms of muscle contraction are the focus of this course. Skeletal muscle physiology, including muscle fiber types, neuromuscular junction, motor unit recruitment, and fatigue are discussed. Mechanisms of adaptation in skeletal muscles and the biomedical adaptations produced by increased and decreased use are also discussed, with emphasis on cell signaling and genomics.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 5311|May not be taken concurrently.

KINS 9204. Cellular Adapt to Exer. 3 Credit Hours.

This course examines control and regulatory mechanisms at the tissue and cellular levels during exercise. Mechanisms of adaptation in cells and tissues and the biomedical adaptations produced by training are discussed, with emphasis on genomics and cell signaling.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

(KINS 4311|May not be taken concurrently)

OR KINS 5311|May not be taken concurrently)

AND (KINS 9203|May not be taken concurrently)

KINS 9205. Exercise Testing and Prescription. 3 Credit Hours.

This course enhances the knowledge and skills of persons interested in preventive and rehabilitative exercise programs. Exercise in the diagnosis, prevention, and rehabilitation of coronary heart disease, as well as the techniques of exercise stress testing are studied. Emphasis is placed on the development of exercise prescriptions from graded exercise test data.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9206. Introduction to Environmental Physiology. 3 Credit Hours.

Mechanisms of physiological response of healthy person to desert, arctic, mountain, and undersea environments are explored, as are the effects of environmental stresses upon exercise performance. Principles of human thermoregulation are demonstrated in a laboratory setting.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9287. Athletic Training/Sports Medicine Practicum I. 1 to 6 Credit Hour.

This is a practicum in which the student satisfies the 200-hour requirement by serving as an athletic trainer in a NATA-approved allied-health setting such as the Temple University Sports Medicine Clinics. Students perform athletic training duties under the supervision of certified athletic trainers and orthopedic surgeons.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

KINS 9288. Athletic Training/Sports Medicine Practicum II. 1 to 6 Credit Hour.

As a continuation of KINS 9287, in this practicum the student further satisfies the 200-hour requirement by serving as an athletic trainer in a NATA-approved allied health setting such as the Temple University Sports Medicine Clinics. Students perform athletic training duties under the supervision of certified athletic trainers and orthopedic surgeons.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

KINS 9301. Motor Development. 3 Credit Hours.

This course is designed to study human movement across the lifespan through the review and critique of major theoretical positions and the analysis of selected movement patterns.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9302. Motor Learning. 3 Credit Hours.

This course is designed to study the acquisition and retention of motor skills as related to practice schedules, information processing, and motor control.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9311. Biomechanics: Human Movement. 3 Credit Hours.

This course offers an assessment of research in the biomechanics of human motion, including electromyography, muscle modeling, link segment modeling and analysis, and energy and power analysis. The above concepts are utilized in the assessment of both normal and atypical populations in sport and rehabilitation contexts.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9401. Psychological Bases of Motor Behavior. 3 Credit Hours.

This course focuses on the psychology of motor behavior, with particular emphasis on motor learning and motor development.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9402. Psychology of Human Motivation and Development. 3 Credit Hours.

This course focuses on the basic psychological variables that influence, and are influenced by, human movement. A diverse set of topics within exercise and sport psychology is explored.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9403. Sociology of Kinesiology. 3 Credit Hours.

This course focuses on the social structural/contextual variables that influence, and are influenced by, human movement. Among the variables examined are socioeconomic status, gender, race, ethnicity, sexual preference, dominant-subordinate perceptions, and value formation and conflict.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9404. Exercise and Mental Health. 3 Credit Hours.

This course provides the student with a background in theory, research, and applied work in the relationship between exercise and mental health.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9405. Psychosocial Interactions and Skilled Performance. 3 Credit Hours.

Research is reviewed and designed in this course, with a focus on the enhancement of performance in both competitive and expressive settings. Applied sports psychology consulting programs are reviewed and designed.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9406. Psychosocial Testing in Exercise and Sport Psychology. 3 Credit Hours.

This course provides the student with a background in test and measurement approaches within exercise and sport psychology, focusing on various measurement approaches/techniques as well as specific tests and measures.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9407. Obesity and Eating Disorders. 3 Credit Hours.

This course aims to provide a comprehensive understanding of obesity and eating disorders. It focuses on kinesiology and its relation to the etiology of the disorder, its prevalence, classification, diagnosis, treatment and prevention. These issues are discussed in terms of their psychosocial, behavioral, and physiological aspects.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9601. Capstone in Athletic Training. 6 Credit Hours.

The 6 credit hour capstone project is the culminating experience for the Doctor of Athletic Training program. It is completed under the mentorship of a research committee and integrates knowledge, skills, and abilities accrued throughout the program. The project will be founded in evidence-based practice and integrate current peer-reviewed research, patient population characteristics, and interdisciplinary provider expertise. The results of this project (e.g., literature review and critically appraised topics papers) will be submitted for presentation and/or publication.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

KINS 8343|Minimum Grade of B-|May not be taken concurrently.

KINS 9683. Mentored Research I. 3 Credit Hours.

This course exposes the Ph.D. student to the basic nature of behavioral and somatic science research. Learning experiences consist of journal article review, laboratory/field techniques, and subject or data collection exposure as directed by faculty mentors.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

KINS 9783. Mentored Research II. 3 Credit Hours.

This course provides the Ph.D. student with the opportunity to be involved in research, under the direction of the faculty mentor, as the assistant project director and as the project director for pilot studies. The student gains experience in these roles with close supervision by the faculty mentor.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:

KINS 9683|Minimum Grade of B-|May not be taken concurrently.

KINS 9785. Internship in Kinesiology. 3 to 6 Credit Hours.

This course provides supervised field and/or clinical experiences in psychological aspects of sport/physical activity, and exercise science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

KINS 9882. Independent Research. 1 to 12 Credit Hour.

This course allows students to engage in independent research. Students present a proposal to the instructor, who advises them on their project. Prior to registration, students obtain a letter of agreement from the department chair indicating the number of credits involved.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

KINS 9901. Research Methods in Kinesiology. 3 Credit Hours.

This course focuses on basic understanding of research methods and related techniques necessary to evaluate research literature in physical education and related fields. Attention is given to the selection of research problems.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

KINS 9994. Preliminary Examination Preparation. 1 to 3 Credit Hour.

This course is for students who have completed all coursework and have not passed the preliminary examination.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

KINS 9995. Master's Research in Kinesiology. 1 to 3 Credit Hour.

This course is open to Master of Science candidates doing either the project option or the first three credits of the thesis option.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

KINS 9996. Master's Thesis in Kinesiology. 3 Credit Hours.

This course is open only to Master of Science candidates completing the last three credits of the thesis option.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Master of Education.

Repeatability: This course may be repeated for additional credit.

KINS 9998. Dissertation Proposal Research. 2 Credit Hours.

This course supports preparation of the dissertation proposal. The course is required for students who have passed the preliminary examinations for their PhD program and who have not yet defended the dissertation proposal.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Doctor of Philosophy.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:

KINS 9994|Minimum Grade of P|May not be taken concurrently.

KINS 9999. Doctoral Dissertation in Kinesiology. 1 to 9 Credit Hour.

This course is limited to candidates for the doctoral degree. This offers continuous registration during the fall and spring terms as required from after completion of the preliminary examination until the dissertation has been completed and accepted by the graduate faculty.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Doctor of Philosophy.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Dissertation Writing Student.

Repeatability: This course may be repeated for additional credit.