Kinesiology/Integrative Exercise Physiology, M.S.

COLLEGE OF PUBLIC HEALTH

Learn more about the Master of Science in Kinesiology.

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 are internationally recognized experts in their fields.
- Strong research activity ensures that graduates of the program are optimally prepared for future research-based academic training and careers in healthcare industries.
- A dynamic urban environment 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 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

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 study full-time, which typically results in completing the degree in two years.

Interdisciplinary Study: Interdisciplinary study is available within the Department of Kinesiology 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 permitted to take up to 9 credits in the department, provided 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 immediate work supervisor who can provide insight into the applicant's abilities, talents, and 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 hold 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. A minimum score of 300 combined on the verbal and quantitative sections of the GRE is preferred. Official GRE scores should be sent to SOPHAS using code 0151.

Applicants who earned their baccalaureate degree from an institution where the language of instruction was other than English, with the exception of those who subsequently earned a master's degree at a U.S. institution, must report scores for a standardized test of English that meet these minimums:

• TOEFL iBT: 79 (send officially to SOPHAS using the SOPHAS-specific TOEFL code 5688)
• IELTS Academic: 6.5
• PTE Academic: 53
• Duolingo: 110

Clearances: Students in the Integrative Exercise Physiology concentration in the Kinesiology M.S. 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 their 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:

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>HRPR 5001</td>
<td>Current and Emerging Issues in Public Health and Health Professions</td>
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<tr>
<td>KINS 5311</td>
<td>Physiology of Exercise</td>
<td>3</td>
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<tr>
<td>KINS 9201</td>
<td>Cardiovascular Exercise Physiology</td>
<td>3</td>
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<tr>
<td>KINS 9203</td>
<td>Appl Ex Physio-Neuromusc</td>
<td>3</td>
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<tr>
<td>KINS 9901</td>
<td>Research Methods in Kinesiology</td>
<td>3</td>
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Intermediate Statistics course 3
Electives
Select three from the following:  

<table>
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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 5111</td>
<td>Genomics in Medicine</td>
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<tr>
<td>KINS 5202</td>
<td>Biomechanical Skeletal Tissue</td>
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<tr>
<td>KINS 5312</td>
<td>Exercise and Nutrient Metabolism</td>
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<tr>
<td>KINS 5313</td>
<td>Exercise and Aging</td>
</tr>
<tr>
<td>KINS 8349</td>
<td>Cadaver Anatomy</td>
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<tr>
<td>KINS 9204</td>
<td>Cellular Adapt to Exer</td>
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Culminating Experience Courses  

Total Credit Hours 30

1. Other KINS or graduate courses in other departments may be taken as electives to tailor the coursework to the interests and skills of the student. Approval from the faculty advisor is required for the student to select an alternate 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.

Minimum Grade to be Earned for All Required Courses: B-

Culminating Event: Students choose between three options: preparation and defense of a master’s thesis, engagement in a master's research project, or completion of a clinical practicum.

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://www.temple.edu/academics/degree-programs/kinesiology-ms-hp-kins-ms

Department Information:
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Submission Address for Application Materials:
https://sophas.liaisoncas.com/

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