EXERCISE PHYSIOLOGY - M.S.

College of Education Health and Human Services
School of Health Sciences
www.kent.edu/ehhs/hs

About This Program
Become a leader in exercise physiology with Kent State’s master’s degree. Our rigorous program is designed to prepare you for a successful career in academia or research. With access to cutting-edge facilities and expert faculty, you’ll gain the knowledge and experience needed to make an impact in the field. Read more...

Contact Information
- Program Coordinator: J. Derek Kingsley | jkingsle@kent.edu | 330-672-0222
- Chat with an Admissions Counselor

Program Delivery
- Delivery: In person
- Location: Kent Campus

Examples of Possible Careers and Salaries*

Biological science teachers, postsecondary
- 9.3% much faster than the average
- 64,700 number of jobs
- $85,600 potential earnings

Medical scientists, except epidemiologists
- 6.1% faster than the average
- 138,300 number of jobs
- $91,510 potential earnings

Additional Careers
- Strength and Conditioning Coach

Accreditation
Commission on Accreditation of Allied Health Education Programs

* Source of occupation titles and labor data comes from the U.S. Bureau of Labor Statistics’ Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

For more information about graduate admissions, visit the graduate admission website. For more information on international admissions, visit the international admission website.

Admission Requirements
- Bachelor’s degree in exercise science, or equivalent preparation, from an accredited college or university
- Minimum 2.750 undergraduate GPA on a 4.000-point scale
- Official transcript(s)
- Goal statement
- Two letters of recommendation
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning one of the following:
  - Minimum 550 TOEFL PBT score
  - Minimum 79 TOEFL IBT score
  - Minimum 77 MELAB score
  - Minimum 6.5 IELTS score
  - Minimum 58 PTE score
  - Minimum 110 Duolingo English score

Degree applicants are expected to have substantial preparation in the sciences, usually including coursework in biology, chemistry, physics, mathematics, anatomy, kinesiology and exercise physiology.

Application Deadlines
- Fall Semester
  - Rolling admissions
- Spring Semester
  - Rolling admissions
- Summer Term
  - Rolling admissions

Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ATTR 53018</td>
<td>ETHICAL LEADERSHIP FOR HEALTH CARE</td>
<td>3</td>
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<tr>
<td>EXPH 63050</td>
<td>RESEARCH PROCESS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>EXPH 63091</td>
<td>RESEARCH SEMINAR</td>
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Additional Requirements or Concentration

Additional Requirements for Students Not Declaring a Concentration

Choice from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>EXPH 63051</td>
<td>QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>EXPH 65081</td>
<td>ENERGY METABOLISM AND BODY COMPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>or EXPH 65083</td>
<td>EXERCISE ENERGY METABOLISM</td>
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</tr>
<tr>
<td>EXPH 65082</td>
<td>CARDIO-RESPIRATORY FUNCTION</td>
<td>3</td>
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<tr>
<td>or EXPH 65084</td>
<td>CARDIOVASCULAR-RESPIRATORY DYNAMICS DURING EXERCISE</td>
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Minimum Total Credit Hours: 34

Additional Requirements for Students Not Declaring a Concentration

Exercise Physiology - M.S.
Major Electives, choose from the following: 12

BSCI 50020  BIOLOGY OF AGING
BSCI 50431  NEUROENDOCRINOLOGY
EXPH 50612  EXERCISE LEADERSHIP FOR THE OLDER ADULT
EXPH 55065  EXERCISE TESTING
EXPH 55070  ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST
EXPH 55081  ADVANCED PHYSIOLOGY OF EXERCISE
EXPH 60610  PHYSIOLOGY OF AGING: IMPLICATIONS FOR HUMAN BEHAVIOR
EXPH 63098  RESEARCH
EXPH 65065  EXERCISE TESTING
EXPH 65070  ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST
EXPH 65081  ADVANCED PHYSIOLOGY OF EXERCISE
EXPH 65086  NEUROBIOLOGY OF MOVEMENT AND EXERCISE
NUTR 63518  ADVANCED SPORTS NUTRITION

Additional electives chosen in consultation with advisor

Culminating Requirement
Choose from the following: 6
EXPH 63098  RESEARCH
& EXPH 65192  INTERNSHIP IN EXERCISE PHYSIOLOGY
EXPH 63199  THESIS I
EXPH 65192  INTERNSHIP IN EXERCISE PHYSIOLOGY

Minimum Total Credit Hours: 27

**Athletic Training Concentration Requirements**

<table>
<thead>
<tr>
<th>Code</th>
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<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ATTR 62010</td>
<td>CONTEMPORARY ISSUES AND EXAM PREP IN ATHLETIC TRAINING</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 62012</td>
<td>EDUCATION AND SUPERVISION PROCESSES IN ATHLETIC TRAINING</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 62014</td>
<td>ADVANCED CLINICAL PROCEDURES IN ATHLETIC TRAINING AND SPORTS MEDICINE</td>
<td>3</td>
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<tr>
<td>ATTR 62016</td>
<td>CLINICAL INQUIRY IN ATHLETIC TRAINING</td>
<td>3</td>
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Concentration Electives, choose from the following: 1 9-12

BSCI 50020  BIOLOGY OF AGING
BSCI 50142  BIOENERGETICS
BSCI 50431  NEUROENDOCRINOLOGY
BSCI 50432  ENDOCRINOLOGY
CHEM 50261  BIOCHEMISTRY: BIOMOLECULE STRUCTURE AND FUNCTION
EXPH 50612  EXERCISE LEADERSHIP FOR THE OLDER ADULT
EXPH 55065  EXERCISE TESTING
EXPH 55070  ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST
EXPH 55081  ADVANCED PHYSIOLOGY OF EXERCISE
EXPH 60610  PHYSIOLOGY OF AGING: IMPLICATIONS FOR HUMAN BEHAVIOR
EXPH 63051  QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY
EXPH 63098  RESEARCH
EXPH 65075  MUSCLE FUNCTION AND EXERCISE
EXPH 65086  NEUROBIOLOGY OF MOVEMENT AND EXERCISE
NUTR 53513  MICRONUTRIENT NUTRITIONAL BIOCHEMISTRY
NUTR 63518  ADVANCED SPORTS NUTRITION

Additional electives chosen in consultation with advisor

Culminating Requirement
Choose from the following: 3-6
ATTR 63098  RESEARCH
ATTR 63199  THESIS I

Minimum Total Credit Hours: 27

1 Students who select ATTR 63098 must take additional coursework to meet the minimum credit hours required for the degree.

**Graduation Requirements**

Only in rare instances does a student fulfill the educational and research expectations within the minimum credit-hour requirement for this degree. Any deficiencies for a doctoral academic preparation must be corrected very early in the approved academic program.

**Program Learning Outcomes**

Graduates of this program will be able to:

1. Pass one of the exams from the American College of Sports Medicine (ACSM) or National Strength and Conditioning Association (NSCA):
   a. Certified Exercise Physiologist (C-EP) or
   b. Certified Strength and Conditioning Specialist (CSCS).
2. Demonstrate understanding of the physiology of human movement across the lifespan.
3. Demonstrate detailed knowledge of the anatomy and physiology of the human and health and disease.
4. Demonstrate knowledge of the pathophysiology of disease, risk factors and special exercise populations, according to the American College of Sports Medicine.

Graduates of the Athletic Training optional concentration will be able to:

1. Apply the principles of the research process in athletic training by engaging with faculty and clinical staff in graduate research initiatives.
2. Engage health care professionals and apply the knowledge gained, through their education in both the classroom and clinical settings.
3. Engage in program improvement as part of a continuous quality improvement initiative by evaluating the effectiveness of the program through multiple evaluation resources.

**Full Description**

The Master of Science degree in Exercise Physiology prepares graduates for a wide variety of career options, including exercise prescription and research, as well as future doctoral study. Representative faculty
research includes the areas of body composition, metabolism/nutritional requirements, environment, clinical exercise physiology and the physiology of aging as it is influenced by physical activity and fitness.

Athletic training faculty also support the degree path with their areas of expertise in clinical and educational research in the field of athletic training.

The Exercise Physiology major includes the following optional concentration:

- The **Athletic Training** concentration is designed to serve the needs of post-certification (or certification-pending) students who wish to further their knowledge and skills in the athletic training profession while pursuing a master's degree. Students have the opportunity to pursue advanced clinical and academic training while obtaining knowledge and skills relative to effective clinical instruction and supervision. Advanced research skills are also a critical component to this advanced track program. Opportunities to perform research independently and/or in conjunction with program faculty are widely available.

**Professional Licensure Disclosure**

This program is designed to prepare students to sit for applicable licensure or certification in Ohio. If you plan to pursue licensure or certification in a state other than Ohio, please review state educational requirements for licensure or certification and contact information for state licensing boards at Kent State's website for professional licensure disclosure.