EXERCISE PHYSIOLOGY - M.S.

College of Education, Health and Human Services
School of Health Sciences
100 Nixson Hall
Kent Campus
330-672-2197
www.kent.edu/ehhs/hs

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 psychophysiology 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.

Fully Offered At:
- Kent Campus

Accreditation
Commission on Accreditation of Allied Health Education Programs

Admission Requirements
- Bachelor’s degree in exercise science, or equivalent preparation, from an accredited college or university for unconditional admission
- Minimum 3.000 undergraduate GPA on a 4.000 point scale for unconditional admission
- Official transcript(s)
- GRE or MCAT score of the 50th percentile
- 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 (paper-based version)
  - Minimum 79 TOEFL IBT score (Internet-based version)
  - Minimum 77 MELAB score
  - Minimum 6.5 IELTS 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. For more information about graduate admissions, please visit the Graduate Studies admission website. For more information on international admission, visit the Office of Global Education’s admission website.

Program Learning Outcomes
Graduates of this program will be able to:

1. Pass one of the American College of Sports Medicine’s (ACSM) exams: Certified Exercise Physiologist or Certified Personal Trainer.
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 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.

Program Requirements

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<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>
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</tbody>
</table>
**Exercise Physiology - M.S.**

**EXPH 65082**  
CARDIO-RESPIRATORY FUNCTION  
3

Thesis or Non-Thesis Option, choose from the following:  
6

EXPH 63199  
ThESIS I

EXPH 63098  
RESEARCH
& EXPH 65192  
and INTERNSHIP IN EXERCISE PHYSIOLOGY

EXPH 65192  
INTERNSHIP IN EXERCISE PHYSIOLOGY

Suggested Electives, choose from the following:  
12

BMS 68610  
HUMAN GROSS ANATOMY I

BMS 68611  
HUMAN GROSS ANATOMY II

BSCI 50020  
BIOLOGY OF AGING

BSCI 60431  
NEUROENDOCRINOLOGY

EXPH 50612  
EXERCISE LEADERSHIP FOR THE OLDER ADULT

EXPH 55065  
EXERCISE TESTING

EXPH 55070  
ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST

EXPH 55080  
PHYSIOLOGY OF EXERCISE

EXPH 60610  
PHYSIOLOGY OF AGING: IMPLICATIONS FOR HUMAN BEHAVIOR

EXPH 63098  
RESEARCH

EXPH 65080  
PHYSIOLOGICAL BASIS OF EXERCISE AND SPORT

EXPH 65081  
ENERGY METABOLISM AND BODY COMPOSITION

EXPH 65082  
CARDIO-RESPIRATORY FUNCTION

EXPH 65083  
EXERCISE ENERGY METABOLISM

EXPH 65084  
CARDIOVASCULAR-RESPIRATORY DYNAMICS DURING EXERCISE

EXPH 65086  
NEUROBIOLOGY OF MOVEMENT AND EXERCISE

NUTR 53513  
MICRONUTRIENT NUTRITIONAL BIOCHEMISTRY

NUTR 53520  
SPORTS NUTRITION

Additional Electives Chosen in Consultation with Advisor

Minimum Total Credit Hours:  27

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**Athletic Training Concentration Requirements**  
[MS-EXPH-ATTR]

**Code**  
**Title**  
**Credit Hours**

**Concentration Requirements**

ATTR 62010  
CONTEMPORARY ISSUES IN ATHLETIC TRAINING  
3

ATTR 62012  
EDUCATION AND SUPERVISION PROCESSES IN ATHLETIC TRAINING  
3

ATTR 62014  
ADVANCED CLINICAL PROCEDURES IN ATHLETIC TRAINING AND SPORTS MEDICINE  
3

ATTR 62016  
CLINICAL INQUIRY IN ATHLETIC TRAINING  
3

Thesis or Non-Thesis Option, choose from the following:  
1  
3-6

ATTR 63199  
THESIS I

ATTR 63098  
RESEARCH

Suggested Electives, choose from the following:  
1  
9-12

BMS 60449  
MEDICAL PHYSIOLOGY I

BMS 60450  
MEDICAL PHYSIOLOGY II

BMS 68610  
HUMAN GROSS ANATOMY I

BMS 68611  
HUMAN GROSS ANATOMY II

BSCI 50020  
BIOLOGY OF AGING

BSCI 50142  
BIOENERgetics

BSCI 50432  
ENDOCRINOLOGY

BSCI 50433  
MAMMALIAN PHYSIOLOGY I

BSCI 50434  
MAMMALIAN PHYSIOLOGY II

BSCI 60431  
NEUROENDOCRINOLOGY

CHEM 50261  
PRINCIPLES OF BIOCHEMISTRY I

EXPH 50612  
EXERCISE LEADERSHIP FOR THE OLDER ADULT

EXPH 55085  
EXERCISE TESTING

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1 Students who select the non-thesis option 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.