

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
- Minimum 58 PTE 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

Code	Title	Credit Hours
Major Requirements		
ATTR 63018	ETHICS FOR HEALTH CARE PROFESSIONALS	3
EXPH 63050	RESEARCH PROCESS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY	3
EXPH 63095	RESEARCH SEMINAR	1
Additional Requirements or Concentration		
Choose from the following:		27
Additional Requirements for Students Not Declaring a Concentration		
Athletic Training Concentration		
Minimum Total Credit Hours:		34

Additional Requirements for Students Not Declaring a Concentration

Code	Title	Credit Hours
Major Requirements		
EXPH 63051	QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY	3
EXPH 65081	ENERGY METABOLISM AND BODY COMPOSITION	3

EXPH 65082	CARDIO-RESPIRATORY FUNCTION	3
Thesis or Non-Thesis Option, choose from the following:		6
EXPH 63199	THESIS I	
EXPH 63098 & EXPH 65192	RESEARCH 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 65086	NEUROBIOLOGY OF MOVEMENT AND EXERCISE	
NUTR 53520	SPORTS NUTRITION	
Additional Electives Chosen in Consultation with Advisor		
Minimum Total Credit Hours:		27

Athletic Training Concentration Requirements

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 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 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 63051	QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY	
EXPH 63098	RESEARCH	
EXPH 65075	MUSCLE FUNCTION AND EXERCISE	
EXPH 65076	ENVIRONMENTAL STRESS AND EXERCISE	
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

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.