

EXERCISE PHYSIOLOGY - M.S.

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

Examples of Possible Careers*

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

Contact Information

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

Fully Offered

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

Admission Terms

- Fall
- Spring
- Summer

*Note

Source of occupation titles and labor data is 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.

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.

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
- Minimum 2.750 undergraduate GPA on a 4.000 point scale (effective spring 2023 admission)
- 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 (paper-based version)
 - Minimum 79 TOEFL IBT score (Internet-based version)
 - Minimum 77 MELAB score
 - Minimum 6.5 IELTS score
 - Minimum 58 PTE score
 - Minimum 110 Duolingo English Test 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, visit the graduate admission website. For more information on international admissions, visit the international 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) or NSCA exams: Certified Exercise Physiologist (C-EP) or 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 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.

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.

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements		
ATTR 53018	ETHICAL LEADERSHIP FOR HEALTH CARE	3
EXPH 63050	RESEARCH PROCESS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY	3
EXPH 63091	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
or EXPH 65083	EXERCISE ENERGY METABOLISM	
EXPH 65082	CARDIO-RESPIRATORY FUNCTION	3
or EXPH 65084	CARDIOVASCULAR-RESPIRATORY DYNAMICS DURING EXERCISE	
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 50431	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 50431	NEUROENDOCRINOLOGY	
BSCI 50432	ENDOCRINOLOGY	
BSCI 50433	MAMMALIAN PHYSIOLOGY I	
BSCI 50434	MAMMALIAN PHYSIOLOGY II	
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 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.