

BIOMEDICAL SCIENCES - PHYSIOLOGY INTERDISCIPLINARY - M.S.

College of Arts and Sciences
School of Biomedical Sciences
Cunningham Hall
Kent Campus
330-672-2263
www.kent.edu/biomedical

Description

The Master of Science degree in Biomedical Sciences–Physiology Interdisciplinary prepares graduates in areas that include cardiovascular, pulmonary, endocrine and neuroendocrine, reproductive or exercise physiology. In this context, emphasis is placed on an integrative approach for both research and graduate education. As with other program areas, the Biomedical Sciences–Physiology Interdisciplinary major takes advantage of the latest molecular and cellular techniques to address questions related to human diseases.

Faculty members are drawn from various departments at Kent State University, Northeast Ohio Medical University (NEOMED) and the Lerner Research Institute of the Cleveland Clinic. Although graduate work may be completed in any of the various research areas, faculty are listed in two general specializations: (1) environmental and comparative physiology and (2) cardiopulmonary and exercise physiology. Each specialization addresses different subject areas of physiology and each has an associated training faculty. The degree program is research oriented and designed to provide students with a thorough grounding in physiological principles and techniques within several well-defined focus areas.

FULLY OFFERED AT:

- Kent Campus

Admission Requirements

- Bachelor's degree from an accredited college or university for unconditional admission
- Minimum 3.000 undergraduate GPA on a 4.000 point scale for unconditional admission
- Academic preparation adequate to perform graduate work in the desired field (typically two years of chemistry, one year of mathematics, one year of physics and courses in anthropology, biology and psychology)
- Official transcript(s)
- GRE scores
- Goal statement
- Three 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 600 TOEFL PBT score (paper-based version)
 - Minimum 100 TOEFL IBT score (Internet-based version)

- Minimum 85 MELAB score
- Minimum 7.0 IELTS score
- Minimum 68 PTE score

Admission with deficiencies may be accorded, but these must be made up during the first two years of graduate study. 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. Publish their research in peer-reviewed journals.
2. Demonstrate the ability to teach undergraduate students.
3. Seek employment after graduation in fields that reflect their area of training.

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements		
BMS 60199	THESIS I	6
CHEM 50245	BIOCHEMICAL FOUNDATIONS OF MEDICINE	4
Physiology Electives, choose from the following:		6-7
BMS 60449 & BMS 60450	and MEDICAL PHYSIOLOGY II	
BSCI 50433 & BSCI 50434	MAMMALIAN PHYSIOLOGY I and MAMMALIAN PHYSIOLOGY II	
Research Methods Electives, choose from the following:		3-9
EXPH 63050 & EXPH 63051 & EXPH 63052	RESEARCH PROCESS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY and QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY and	
PSYC 61651	QUANTITATIVE STATISTICAL ANALYSIS I ¹	
Neuroscience or Exercise Physiology Electives, choose from the following:		4-6
BMS 60729	CELLULAR AND MOLECULAR NEUROSCIENCE ¹	
EXPH 65081 & EXPH 65082	ENERGY METABOLISM AND BODY COMPOSITION and CARDIO-RESPIRATORY FUNCTION	
Electives Approved by Advisory Committee		0-9
Minimum Total Credit Hours:		32

¹ Students who select PSYC 61651 and/or BMS 60729 should expect to take additional electives to meet the minimum 32 credit hours for the degree.