BIOMEDICAL SCIENCES - PHYSIOLOGY INTERDISCIPLINARY - M.S.

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 physiology program 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, the 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
• Official transcript(s)
• 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)
• 3.0 GPA
• GRE scores
• Goal statement
• Three letters of recommendation

English Language Proficiency Requirements for International Students: All international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning a minimum 600 TOEFL score (100 on the Internet-based version), minimum 85 MELAB score, minimum 7.0 IELTS score or minimum 68 PTE Academic score. For more information on international admission, visit the Office of Global Education's admission website. Effective spring 2018.

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 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

[AS-MS-PSII]

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<th>Major Requirements</th>
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<tr>
<td>BMS 60199 THEESIS I</td>
<td>6</td>
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<td>CHEM 50245 BIOCHEMICAL FOUNDATIONS OF MEDICINE</td>
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Choose from the following: 6-7

- BMS 60449 MEDICAL PHYSIOLOGY I
- & BMS 60450 and MEDICAL PHYSIOLOGY II
- BSCI 50433 MAMMALIAN PHYSIOLOGY I
- & BSCI 50434 and MAMMALIAN PHYSIOLOGY II

Choose from the following: 3-9

- EXPH 63050 & EXPH 63051 and RESEARCH PROCESS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY
- & EXPH 63052 and QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY
- and ADVANCED RESEARCH DESIGN AND STATISTICS IN EXERCISE PHYSIOLOGY
- PSYC 61651 QUANTITATIVE STATISTICAL ANALYSIS I

Choose from the following: 4-6

- BMS 60729 CELLULAR AND MOLECULAR NEUROSCIENCE
- EXPH 65081 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.