**BIOMEDICAL SCIENCES - NEUROSCIENCE - PH.D.**

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

**Description**

The Ph.D. degree in Biomedical Sciences-Neurosciences is an inter-institutional program. Students complete a common set of core courses that cover fundamental principles in neuroscience, from the cellular/molecular to the systems level. Students also complete elective courses tailored to their chosen subdiscipline. Research projects are completed under the guidance of a neuroscience faculty member at Kent State University, Northeast Ohio Medical University (NEOMED) or the Cleveland Clinic. Areas of research focus in the neurosciences include behavioral neuroscience, sensory neuroscience, developmental neuroscience and neurodegenerative diseases.

**FULLY OFFERED AT:**  
- Kent Campus

**Admission Requirements**

- Bachelor’s degree (master’s degree is not required)  
- Official transcript(s)  
- Minimum 3.0 undergraduate GPA  
- Sufficient undergraduate coursework in chemistry, math, biology, psychology and/or neuroscience  
- Academic preparation adequate to complete graduate coursework in neuroscience  
- GRE general test scores  
- Three letters of recommendation  
- Goal statement indicating the applicant’s interests in neuroscience and career aspirations

**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.*

Applicants for the Ph.D. degree are preferred over the M.S. degree, given applications of roughly equivalent merit. 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.

**Program Requirements**

**Major Requirements**

**[PHD-NEUR]**

**Major Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 70120</td>
<td>LABORATORY TECHNIQUES IN BIOMEDICAL SCIENCES (taken twice)</td>
<td>4</td>
</tr>
<tr>
<td>BMS 70462</td>
<td>NEUROBIOLOGY: SYSTEMS AND BEHAVIOR</td>
<td>4</td>
</tr>
<tr>
<td>BMS 70729</td>
<td>CELLULAR AND MOLECULAR NEUROSCIENCE</td>
<td>4</td>
</tr>
<tr>
<td>BMS 71000</td>
<td>RESPONSIBLE CONDUCT OF RESEARCH</td>
<td>1</td>
</tr>
<tr>
<td>BMS 71001</td>
<td>INTRODUCTION TO BIOMEDICAL SCIENCES</td>
<td>1</td>
</tr>
<tr>
<td>BMS 80199</td>
<td>DISSERTATION I</td>
<td>30</td>
</tr>
</tbody>
</table>

**Quantitative Methods and Statistics Electives, choose from the following:**  
- BMS 78637 BIOANTHROPOLOGICAL DATA ANALYSIS I  
- BMS 78638 BIOANTHROPOLOGICAL DATA ANALYSIS II  
- BSCI 70103 BIOLOGICAL STATISTICS  
- PSYC 71651 QUANTITATIVE STATISTICAL ANALYSIS I  
- PSYC 71654 QUANTITATIVE STATISTICAL ANALYSIS II

**Elective and Research Courses Approved by Dissertation Committee**  
Minimum Total Credit Hours for Post-Baccalaureate Students: 90

Minimum Total Credit Hours: 60

1. Doctoral candidates, upon admission to candidacy, must register for BMS 80199 for a total of 30 hours. It is expected that doctoral candidates will continuously register for BMS 80199, and thereafter BMS 80299BMS 80299BMS 80299, each semester, including one term each summer, until all requirements for the degree have been met.

**Graduation Requirement**

Post-baccalaureate students must complete a minimum 60 credit hours, and post-master’s students a minimum 30 credit hours, of coursework prior to dissertation, which includes minimum 21 credit hours that are letter graded (required and elective courses).