BIOMEDICAL SCIENCES - PHARMACOLOGY - PH.D.

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

Description
The Ph.D. degree in Biomedical Sciences–Pharmacology provides substantial opportunity to conduct research in molecular targeting, drug design and drug delivery in developing new approaches to treat disease. The multidisciplinary program enrolls a select group of graduate students interested in research-based careers in pharmacology, and provides a balance of classroom and laboratory work involving faculty at Kent State University and Northeast Ohio Medical University (NEOMED). Strong research foci exist in the areas of cardiovascular and metabolic diseases, neurodegenerative and blood brain barrier pharmacology. Interdisciplinary approaches to research and theoretical problems are strongly emphasized.

FULLY OFFERED AT:
• Kent Campus

Admission Requirements
• Bachelor’s or master’s degree (master’s degree is not required for admission to the Ph.D.)
• Official transcript(s)
• Minimum 3.0 undergraduate/graduate GPA
• GRE general test scores
• Three letters of recommendation
• Goal statement indicating the applicant’s interests in pharmacology and career aspirations
• Academic preparation adequate to complete graduate coursework in general chemistry, organic chemistry, biochemistry, physics and physiology

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.

For more information about graduate admissions, please visit the Graduate Studies website.

Program Requirements
Major Requirements

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<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 70440</td>
<td>CELLULAR AND MOLECULAR SIGNALING</td>
<td>3</td>
</tr>
<tr>
<td>BMS 70502</td>
<td>MOLECULAR PHARMACOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BMS 70503</td>
<td>PHARMACOLOGY JOURNAL REVIEW</td>
<td>1</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 Elective, 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 11-13

Minimum Total Credit Hours for Post-Baccalaureate Students: 90

Minimum Total Credit Hours: 60

1 Upon completion of course requirements and candidacy exams, doctoral students must register for BMS 80199 for two semesters for a total of 30 credit hours and thereafter BMS 80299 until all requirements for the degree have been met. As soon after completion of the candidacy examination as possible, the dissertation committee will be established consisting of the guidance committee and an outside discipline member—a graduate faculty member from another department at Kent State University or another program committee of the School of Biomedical Sciences. The student will submit to this committee her/his prospectus for the dissertation. The format of the prospectus will parallel that utilized for NIH grant proposals (without biographical, budget and facilities information). The dissertation committee may elect to examine the candidate on the proposal, may accept it as submitted, or may reject it with specific reasons and recommendations for reformulation.

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).