The department offers a PhD program in biomedical science. Increasingly, scientific work is becoming interdisciplinary. In response to this trend, we allow the student to focus on more than one area in biomedical science. The concept is appropriate for both those entering as well as those currently employed in the field, including research technicians, clinical laboratory workers, science teachers, and science administrators. For those currently employed, the flexibility of our program can enhance their performance in a present position or open up new employment opportunities.

**Program Requirements**
Complete all courses and requirements listed below unless otherwise indicated.

**Milestones**
- Qualifying examination
- Annual review
- Dissertation committee
- Dissertation proposal
- Dissertation defense

**Required Course Work**
A grade of C– or higher is required in each course.

<table>
<thead>
<tr>
<th>Required Core</th>
<th>13–18 semester hours from the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 5100</td>
<td>Concepts in Pharmaceutical Science</td>
</tr>
<tr>
<td>PHSC 5300</td>
<td>Pharmaceutical Biochemistry</td>
</tr>
<tr>
<td>or PHSC 7010</td>
<td>Pharmaceutical Sciences Laboratory</td>
</tr>
<tr>
<td>PHSC 5310</td>
<td>Cellular Physiology</td>
</tr>
<tr>
<td>PHSC 6210</td>
<td>Drug Design, Evaluation, and Development</td>
</tr>
<tr>
<td>PHSC 6214</td>
<td>Experimental Design and Biostatistics</td>
</tr>
<tr>
<td>PHSC 6216</td>
<td>Human Physiology and Pathophysiology</td>
</tr>
<tr>
<td>PHSC 6212</td>
<td>Research Skills and Ethics</td>
</tr>
<tr>
<td>or BIOL 6381</td>
<td>Ethics in Biological Research</td>
</tr>
</tbody>
</table>

**Pharmaceutics Core**
- PMST 6252 Pharmacokinetics and Drug Metabolism 3
- PMST 6250 Advanced Physical Pharmacy 2
- PMST 6254 Advanced Drug Delivery System 3

**Electives**
Complete 7–12 semester hours in the following subject areas: 7-12
- PHSC, PMCL, PMST, BIOL, CHEM, NNMD, BIOT

**Seminar and Colloquium**

**Seminar**
Complete the following (repeatable) course twice: 2
- PHSC 6300 Pharmaceutical Science Seminar

**Colloquium**
- PHSC 6810 Pharmaceutical Science Colloquium 1

**Research and Dissertation**
Qualifying Exam