NEUROSCIENCE PH.D

All students must meet the Requirements for the Doctor of Philosophy Degree

OVERVIEW
The Neuroscience Graduate Program is a university-wide, multidisciplinary, Ph.D. granting program that has more than 50 faculty mentors across 13 departments and 5 colleges. This program emphasizes rigorous training in neuroscience-related research, educates students about human health, and encourages interdisciplinary research projects.

SPECIFIC REQUIREMENTS
Requirements for Admission to Graduate Studies for the Degree of Doctor of Philosophy
Incoming students should have a bachelor’s and/or master’s degree in a biological science, neuroscience, chemistry, physics, engineering, psychology, mathematics, communication sciences or computer science. Research experience is not required, but is strongly recommended.

GRE General Test scores and scores on the Subject Test in Biology, Biochemistry, Cell and Molecular Biology, or Psychology are not required but are recommended. Applicants whose native language is not English must submit scores from Test of English as a Foreign Language (TOEFL).

Three letters of reference are required. Letters from research advisors or supervisors are highly desirable attesting to applicant’s abilities to work independently in an academic setting.

Minimum Degree Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 261</td>
<td>Neurobiology (for students who have not taken any neurobiology classes)</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 315</td>
<td>Biobehavioral Proseminar</td>
<td>3</td>
</tr>
<tr>
<td>GRMD 354</td>
<td>Medical Human Struc &amp; Fncion</td>
<td>4-8</td>
</tr>
<tr>
<td></td>
<td>(When offered together, students may take MPBP 301 and NSCI 395 section on gross and histologic anatomy of the peripheral nervous system in place of GRMD 354)</td>
<td></td>
</tr>
<tr>
<td>GRMD 357</td>
<td>Medical Neural Science</td>
<td>6</td>
</tr>
<tr>
<td>PSYS 304</td>
<td>Adv Statistical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 327</td>
<td>Resp Conduct in Biomed Rsch</td>
<td>1</td>
</tr>
<tr>
<td>NSCI 381</td>
<td>Seminar in Neuroscience (Must be taken twice)</td>
<td>1</td>
</tr>
<tr>
<td>NSCI 382</td>
<td>Seminar in Neuroscience (Must be taken twice)</td>
<td>1</td>
</tr>
<tr>
<td>CLBI 301</td>
<td>Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 491</td>
<td>Doctoral Dissertation Research (Minimum of 20 required total)</td>
<td>1-18</td>
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APPROVED COURSES FOR GRADUATE CREDIT
Below is a list of approved selectives. A student, in conjunction with their advisor, may request another course to fulfill the selective requirement. The request will need to be approved by the NGP Director.

Courses eligible for Advanced Neuroscience Selectives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NSCI 320</td>
<td>Developmental Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 323</td>
<td>Neurochemistry</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 326</td>
<td>Basic Sci-Neurologic Disease</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 328</td>
<td>Techniques in Microscopy</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 329</td>
<td>Topics in Excitable Membranes</td>
<td>2</td>
</tr>
<tr>
<td>NSCI 330</td>
<td>Comparative Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 262</td>
<td>Neurobiology Techniques</td>
<td>4</td>
</tr>
<tr>
<td>CSD 353</td>
<td>Adult Neuropathologies</td>
<td>3</td>
</tr>
<tr>
<td>MPBP 301</td>
<td>Human Physiology &amp; Pharm I</td>
<td>4</td>
</tr>
<tr>
<td>MPBP 310</td>
<td>Molecular Control of the Cell</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 272</td>
<td>Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 290</td>
<td>Topics Molecular&amp;Cell Pharm</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 311</td>
<td>Seminar in Learning Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 320</td>
<td>Animal Minds</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 319</td>
<td>Neurobio of Learning &amp; Memory</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 316</td>
<td>Neuropsychopharmacology</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 390</td>
<td>Contemporary Topics</td>
<td>3</td>
</tr>
<tr>
<td>PSYS 395</td>
<td>Advanced Readings/Research</td>
<td>1-6</td>
</tr>
<tr>
<td>BIOC 301</td>
<td>General Biochemistry</td>
<td>0 or 3</td>
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</table>

Comprehensive Examination
The qualifying examination for advancement to candidacy for a Ph.D. in Neuroscience must be taken prior to the end of the first semester of the second year. The exam has both a written and oral component, both of which must be completed successfully. The exam committee will consist of at least three members of the NGP faculty. Should the student fail the examination, only one re-examination is allowed.

Requirements for Advancement to Candidacy for the Degree of Doctor of Philosophy
Satisfactory completion of required courses and research rotations. Approval of the written and oral portions of the qualifying comprehensive examination.