PhD in Neuroscience

Degree Requirements

The Graduate School requires a minimum of 72 credit hours for completion of the Doctoral degree. The Interdisciplinary Neuroscience Program requires a certain number of these courses to be at the 8000 level or above (excluding research problems and thesis research).

Required Core Courses

- BIO_SC 8440 Integrative Neuroscience I 3
- BIO_SC 8442 Integrative Neuroscience II 3
- BIO_SC 8050 Professional Survival Skills 2

Scientific Ethics (1 course, approved by thesis committee):

- Possibilities include but are not limited to:
  - BIOCHM 8060 Ethical Conduct of Research
  - BIO_SC 8060 Ethical Conduct of Research
  - PSYCH 8910 Responsible Conduct of Research thru Engagement, Enactment and Empowerment NIH and other Federal Age
  - MPP 8415 Responsible Conduct of Research

- V_PBIO 8641 Introduction to Research Ethics
- GRAD 9001 Topics in Graduate School

Cellular/Molecular Courses: select one

- BIOL_EN 7070 Bioelectricity 3
- MPP 7424 Medical Pharmacology 4
- MPP 9426 Transmembrane Signaling 4
- MPP 9432 Mammalian Membrane Physiology 1-3

System/Behavior Courses: select one

- BIO_SC 7560 Sensory Physiology and Behavior 3
- BIO_SC 7590 Computational Neuroscience 4
- BIO_SC 7986 Neurology of Motor Systems 3
- PSYCH 8210 Functional Neuroscience 3
- PSYCH 9210 Psychopharmacology 3
- V_BSCI 9467 Neural Cardiorespiratory Control 3
  or MPP 9437 Neural Cardiorespiratory Control

Statistics course: select one

- Possibilities include but are not limited to:
  - STAT 7020 Statistical Methods in the Health Sciences 3
  - STAT 7070 Statistical Methods for Research 3
  - STAT 7410 Biostatistics and Clinical Trials 3
  - STAT 7540 Experimental Design 3
  - PSYCH 3010 Research Methods in Psychology I 3

Seminars

- Neuroscience Seminar Course 2
- Neuroscience Journal Club: examples include
  - BIO_SC 8187 Seminar in Areas of Specialization
  - NEUROSCI 8187 Neuroscience Journal Club
  - PTH_AS 8500 Seminar in Translational Neuroscience

Rotation and Thesis research

- NEUROSCI 9090 Thesis Research in Neuroscience (repeatable up to 28 hours) 1-6
- NEUROSCI 8090 Rotation Research in Neuroscience

Admission Criteria

Fall deadline: December 15

- Minimum TOEFL scores:
  - Internet-based test (IBT) 100
  - Paper-based test (PBT) 600

- Minimum GRE scores:
  - When did you take the GRE? Verbal + Quantitative Analytical
    - Prior to August 1, 2011 1200 308
    - On or After August 1, 2011 308

Neuroscience comprises a united field that integrates across many disciplines, and students from a variety of academic backgrounds are encouraged to apply to the Interdisciplinary Neuroscience Program (INP). U.S. residents and international applicants are strongly encouraged to apply.

Required Application Materials

To the Graduate School:

- All required Graduate School documents

To the INP Program:

- Departmental application
- 3 letters of recommendation
- GRE scores
- TOEFL (if applicable)