NEUROSCIENCE

Codirectors: Yueping Zhang and Norma Velazquez-Ulloa

The interdisciplinary neuroscience minor is designed to allow students an opportunity to explore the fast-growing field of neuroscience from multiple perspectives. Students develop an in-depth understanding of nervous-system function in a structured and rigorous way while pursuing a major in another discipline. The minor draws from multiple departments and programs, including biochemistry and molecular biology, biology, chemistry, world languages and literatures, mathematical sciences, philosophy, physics, and psychology.

Minor Requirements

A minimum of 22 semester credits (six courses), distributed as follows:

- BIO 252 Introduction to Neuroscience, PSY 252 Introduction to Neuroscience, or PSY 280 Brain and Behavior.
- One 300- or 400-level neuroscience course with laboratory, chosen from the following:
  - BIO 380 Behavioral Genetics
  - BIO 422 Neurobiology
  - PSY 350 Behavioral Neuroscience
  - PSY 355 Cognitive Neuroscience
- One 300- or 400-level neuroscience course chosen from the following:
  - BIO 380 Behavioral Genetics
  - BIO 422 Neurobiology
  - BIO 490 Special Topics in Biology (when the focus is neuroscience)
  - PSY 350 Behavioral Neuroscience
  - PSY 355 Cognitive Neuroscience
  - PSY 380 Drugs and Behavior
  - PSY 410 Advanced Topics in Neuroscience
- Three elective courses chosen from the following list. At least one of these courses must be from biology or chemistry, and at least one must be from outside of biology and chemistry. Students are strongly encouraged to take neuroscience electives outside of their own major, and may ask the program director for permission to use only courses from outside their major.
  - BCMB 496 Biochemistry/Molecular Biology Senior Research (when topic has been approved by Neuroscience Program Committee)
  - BIO 202 Biological Core Concepts: Mechanisms (cannot apply if major is biology or BCMB)
  - BIO 320 Human Genes and Disease
  - BIO 352 Animal Behavior
  - BIO 369 Developmental Biology
  - BIO 380 Behavioral Genetics
  - BIO 422 Neurobiology
  - BIO 490 Special Topics in Biology (when the focus is neuroscience)
  - BIO 495 Biology Senior Thesis (when topic has been approved by Neuroscience Program Committee)
  - CHEM 330 Structural Biochemistry
  - CHEM 480 Senior Research (when topic has been approved by Neuroscience Program Committee)
  - CS 369 Artificial Intelligence and Machine Learning
  - PHIL 312 Philosophy of Language
  - PHIL 313 Philosophy of Mind
  - PHYS 390 Biomedical Imaging
  - PSY 220 Thinking, Memory, and Problem Solving
  - PSY 310 Cognition
  - PSY 350 Behavioral Neuroscience
  - PSY 355 Cognitive Neuroscience
  - PSY 375 Health Psychology
  - PSY 380 Drugs and Behavior
  - PSY 400 Advanced Topics in Psychology (when topic has been approved by Neuroscience Program Committee)
  - PSY 410 Advanced Topics in Neuroscience
  - PSY 490 Senior Thesis (when topic has been approved by Neuroscience Program Committee)
  - WLL 240 Introduction to Linguistics

At least 12 semester credits must be exclusive to the minor and may not be used in any other set of major/minor requirements.

Faculty


Peter Drake. Associate professor of computer science, chair of the Department of Mathematical Sciences. Artificial intelligence, data science, software development. PhD 2002 Indiana University. MS 1995 Oregon State University. BA 1993 Willamette University.


