NEUROSCIENCE AND BEHAVIOR (PH.D.)

Description

A new Neuroscience and Behavior (Ph.D.) has been approved for Academic Catalog year 2025/2026.

Neuroscience is a fast-growing scientific field where research is having an immediate and significant societal impact. The need to understand animal (including human) behavior is likewise increasing, particularly in the face of globalization and our rapidly-changing environment. This graduate degree program (NSB) offers a home to students interested in combining these two interests. The NSB Graduate Program provides an integrative interdisciplinary learning experience in both neuroscience and behavior, ranging from model organisms to humans, that trains professionals in the academic, industry, and clinical communities. The study of the brain requires the integration of a wide diversity of fields including but not limited to biology, biochemistry, physics, psychology, bioinformatics, and bioengineering. Students in NSB approach their studies with a focus on organisms, and apply whatever tools are necessary to answer thematic and specific questions. Studies include:

- *Behavioral, Systems, and Cognitive Neuroscience* examines the biological basis of cognition, perception, and behaviors in humans and other animals, investigates how neural circuits in the brain form memory, generate thought and language, make decisions, and control behaviors.
- *Clinical Neuroscience* studies the mechanisms underlying neurologically based communication disorders and approaches to their rehabilitation.
- *Molecular and Cellular Neuroscience* explores the genes, proteins, signaling pathways, and neural circuits that govern the function, development, and aging of the nervous system (normal and diseased).

Course requirements and more information will be included in the 2025/2026 Academic Catalog, published in March 2025.