Neuroscience

The Neuroscience major and minor are rigorous interdisciplinary programs designed to provide a foundation in neuroscience and to allow students to focus their research interests in a variety of levels of nervous system functioning, from the activity of single neurons to the complexity of behavioral systems. Majors distribute their course work across the fields of biology, chemistry, philosophy, physics, and psychology as these disciplines all contribute to the interdisciplinary nature of the brain sciences.

Major Requirements

BIO 121 Cell & Molecular Biology
BIO 131 Organismal Biology
CHM 160 Organic Chemistry I
PHY 101/107 Intro/Gen Physics I
PHY 102/108 Intro/Gen Physics II
PSY 101 Elementary Psychology I

Math requirement:
MTH 125, 151 OR BIO 245
NSC 210 Introduction to Neuroscience
NSC 300 Experimental Neuroscience
NSC 400 Advanced Topics in Neuroscience
Three NSC electives from BIO, PSY, PHL or other approved program

Capstone: Approved research project from summer internship, NSC 500/501, or approved BIO 412/PSY advanced lab

Minor Requirements

2 introductory sciences courses from different disciplines (BIO, CHM, PHY, or PSY)
NSC 210 Introduction to Neuroscience
NSC 300 Experimental Neuroscience
NSC 400 Advanced Topics in Neuroscience
Approved research project from summer internship, NSC 500/501, or approved BIO 412/PSY advanced lab

Beyond the Classroom

Students have many opportunities for research, internships, conferences, and networking beyond the classroom that give them an advantage to prepare for life after W&J.

Research and Internships

- On-campus summer research internships in neuromuscular development, molecular genetics of neurodegeneration, or ion-channel trafficking
- Off-campus summer research internships with financial support from W&J
- Network of alumni and colleagues who work with students in summer research internships

Careers

- Health Professions (M.D., D.O., PA, PT)
- Research Careers (Ph.D., M.S.)
- Pharmaceutical Industry

Alumni Achievements

- Assistant Professor of Psychiatry and Behavioral Sciences, Johns Hopkins University
- US Medical Lead, Teva Pharmaceuticals
- Research Health Science Specialist at Providence VAMC - Center for Neurorestoration and Neurotechnology

A full list of courses and descriptions can be found online in the College catalog.