What will your curriculum look like?

There are three categories of required neuroscience courses:

- **Core courses**—All students must take Principles of Neuroscience (NBIO 140b) and a one-semester course in quantitative methods (statistics or modeling).

- **Basic science electives**—Students must complete nine (for B.A. degree) or 10 (for B.S. degree) semester courses from chemistry, computer science, mathematics, and physics. Only courses numbered 10 and above qualify. Laboratory courses associated with basic science electives must be taken and are counted as one-half of a regular semester course.

- **Neuroscience electives**—Students must select six (for a B.A. degree) or seven (for a B.S. degree) one-semester electives. Two must be chosen from within a group of biology courses specialized for neuroscience, two from a group of psychology courses specialized for neuroscience, and the rest from either of these two groups, or from a third group of biology courses that are fundamental for understanding principles of neuroscience.

Senior honors thesis. Seniors who do collaborative research with a faculty member may receive academic credit for completing a two-semester, independent research project during their senior year. They develop a cutting-edge research proposal, obtain approval, perform the project, write a thesis, and orally defend it. Most theses are published, giving students insight into the excitement of a research career.

B.S./M.S. program. Highly motivated students may petition in their junior year to receive a combined B.S./M.S. degree in four years. This requires satisfying the B.S. course requirements, plus three additional neuroscience electives (of the 10 electives required for the B.S./M.S. degree, at least six must be at the graduate level). Students must also complete a senior honors thesis or equivalent research.

Some exciting features of the neuroscience program:

- Brandeis is an exciting place for neuroscience research and study because we have an outstanding and highly interactive research community.

- Research experience is encouraged, and ample opportunities exist in faculty laboratories.

- Neuroscience faculty are affiliated with six participating departments (biology, biochemistry, psychology, physics, chemistry, and computer science).

- Most neuroscience laboratories are housed within the Volen Center for Complex Systems and adjoining buildings.

What kind of career and education options will you have?

The most common paths of further study pursued by neuroscience majors are medicine and graduate studies in experimental psychology or neuroscience. Many students double major in other science and nonscience disciplines, opening up additional opportunities.

How can you learn more?

Visit the program website at www.bio.brandeis.edu/neuro01/ug_neuro.html or contact the department administrator, Barbara Wrightson, at wrightson@brandeis.edu, or the undergraduate advisor, Paul DiZio, at dizio@brandeis.edu.

Why pursue neuroscience at Brandeis University?

The undergraduate major in neuroscience is designed to provide an interdisciplinary program of study of the neural mechanisms involved in human and animal behavior. Understanding the brain is one of the greatest challenges of modern science and requires methodologies ranging from the psychological analysis of behavior to the molecular biology of neurons, including construction of mathematical models. Students are encouraged to take courses in the psychology of behavior, cellular and systems neuroscience, molecular neurobiology, and computational neuroscience, and will combine this breadth with a strong foundation in basic science.

Neuroscience
Mailstop 013
Waltham, Massachusetts
02454-9110
Volens 206
Phone: 781-736-4870
Fax: 781-736-2398