

# MASTER OF ARTS IN NEUROSCIENCE AND BEHAVIOR

The Program in Neuroscience and Behavior (NS&B) opens avenues for students to explore the role of the brain in expressing behavior in animals including humans. Students learn the details of how the nervous system works and how it functions with other biological and psychological systems. New technologies in contemporary neuroscience have helped to bring about many important discoveries, with more on the horizon. Wesleyan neuroscience students learn in an interdisciplinary environment that includes coursework in biology, psychology, and chemistry. Students often expand their learning to include topics such as statistics, computer programming, design, and philosophy of science. Lab-based methods courses and hands-on research in state-of-the-art laboratories give students a rich educational experience that provides a foundation for various career options that include medicine, basic and applied research in the public or private sector, and scientific writing or reporting.

The NS&B program offers graduate study leading to the degree of Master of Arts through the BA/MA program. Admission to the program is competitive and requires completion of an independent research thesis. In their MA year, students work closely with faculty research mentors while they complete coursework and participate in seminars. Prospective candidates are expected to declare their intention to enter the BA/MA program in the first semester of their junior year to permit the design of an acceptable program of study.

MA candidates complete at least six credits in addition to the 32 credits required for the Wesleyan BA. Three MA credits are earned through Journal Club, Advanced Research, and the Research Seminar. The remaining MA credits are earned through lecture, lab, or seminar courses determined by the student and mentor and approved by the Office of Graduate Student Services. Students in the MA program will submit a written thesis describing their research that they will present orally to their committee in a closed-door defense of the thesis and present publicly during the research seminar.

## COURSES

### BA/MA PROGRAM

The MA will require a minimum of 6 credits in addition to the 32 necessary for the Wesleyan BA. Three credits will be earned through Journal Club I & II (0.25 credits x 2 = 0.50), Advanced Research NS&B549/NS&B550 (1.0 credits x 2 = 2.0) and Research Seminar (.50 credits). The remaining credits will be earned through lecture, lab, or seminar courses (200, 300, or 500-level) determined by the student and mentor; a minimum of two of these must be one-credit courses. MA credit will only be awarded for academic work in which grades of B minus or higher have been earned. A student in the BA/MA program who earns more than 32 credits during the BA may apply any excess credits toward the MA, providing that they are relevant to the research area and they have not been used to fulfill an undergraduate major requirement. All degree-seeking graduate students are required to register for at least one credit in each semester that they are enrolled in the university.

## LANGUAGE REQUIREMENT

There are no language requirements for the BA/MA Program in NS&B.

## PROGRESS AND QUALIFYING EXAMS

A 3-member committee of the faculty will be established upon acceptance in the BA/MA program. The candidate will meet with their committee in early stages of research and meet with them in the second semester of their MA year. This committee determines when sufficient experimental work has been completed and must approve the final written document. Students in this program are required to submit a MA thesis describing the research which they have carried out in partial fulfillment of the degree requirements.

## TEACHING

There are no requirements for BA/MA candidates to teach although the opportunity may arise.

## RESEARCH

Students conduct research and complete a written thesis in partial fulfillment of their MA degree. For the most recent information regarding the research carried out by faculty in the NS&B program, please visit the NS&B website: <https://www.wesleyan.edu/nsb/faculty.html>

## THESIS AND DEFENSE

Students in this program will submit an MA thesis describing the research and will present this to their committee in a closed-door oral defense of the thesis. Following the oral defense with the thesis committee, the students will receive two grades for their thesis work: one for the oral component and one for the written component of the thesis. Additionally, students are required to give a public presentation during the research seminar (BIOL557 or CHEM587/CHEM588) describing their research as partial fulfillment of the degree requirements.