Behavioral Neuroscience

Website (https://cos.northeastern.edu/behavioral-neuroscience/)

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Behavioral neuroscience is a broad and dynamic interdisciplinary field which focuses on understanding physiological brain mechanisms and how they give rise to behavioral functions in humans and animals. The relationship between the brain's activity and an organism's behavior, both normal and pathological, is examined at multiple levels of analysis, from how a cell functions to how a facial expression conveys trust or fear.

As a behavioral neuroscience major, you will take courses across multiple departments to acquire foundational knowledge and strong critical thinking skills in the realms of biology, psychology, physical sciences, and mathematics. Through our combined majors, you can explore the intersection of behavioral neuroscience with complementary disciplines including philosophy, design, computer science, and data science. For some of our majors, we offer an accompanying PlusOne Master of Science in Bioinformatics or Applied Behavior Analysis.

Ample opportunities exist for students to put theory into practice while acquiring valuable hands-on research and clinical experience at renowned institutions across the world through Northeastern's co-op program. Faculty-mentored directed studies and honors projects are guided by investigators with shared interests from academic units, centers, and institutes throughout campus.

Our rigorous and comprehensive curriculum prepares students for employment in clinical settings or the biotech and pharmaceutical industry or for further graduate training in a plethora of science disciplines or in healthcare professions. Our graduates are qualified for a wide variety of careers including nonprofits, law, science writing, big data, artificial intelligence, and more.

Programs

Bachelor of Science (BS)

- Behavioral Neuroscience (http://catalog.northeastern.edu/undergraduate/science/behavioral-neuroscience/behavioral-neuroscience-bs/)
- Behavioral Neuroscience and Design (http://catalog.northeastern.edu/undergraduate/science/behavioral-neuroscience/design-bs/)
- Behavioral Neuroscience and Philosophy (http://catalog.northeastern.edu/undergraduate/science/behavioral-neuroscience/philosophy-bs/)
- Computer Science and Behavioral Neuroscience (http://catalog.northeastern.edu/undergraduate/computer-information-science/computer-information-science-combined-majors/computer-science-behavioral-neuroscience-bs/)
- Data Science and Behavioral Neuroscience (http://catalog.northeastern.edu/undergraduate/computer-information-science/computer-information-science-combined-majors/data-science-behavioral-neuroscience-bs/)

Courses

Behavioral Neuroscience Courses

Search BNSC Courses using FocusSearch (http://catalog.northeastern.edu/class-search/?subject=BNSC)

BNSC 1000. Behavioral Neuroscience at Northeastern. 1 Hour.
Introduces first-year and new transfer students to the major and the field of behavioral neuroscience and to the professional and academic resources available to students at Northeastern University. Acquaints students with their faculty, advisors, and fellow students; provides an initial orientation to undergraduate research, cooperative education, study abroad, and other experiential learning options; familiarizes students with academic support resources and leadership opportunities; provides grounding in the culture and values of the university community—in short, familiarizes students with all skills needed to become a successful university student.

BNSC 1990. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

BNSC 2990. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

BNSC 3990. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

BNSC 4950. Seminar. 1-4 Hours.
Offers an in-depth study of selected topics.

BNSC 4970. Junior/Senior Honors Project 1. 4 Hours.
Focuses on in-depth project in which a student conducts research or produces a product related to the student’s major field. Combined with Junior/Senior Project 2 or college-defined equivalent for 8-credit honors project. May be repeated without limit.

BNSC 4971. Junior/Senior Honors Project 2. 4 Hours.
Focuses on second semester of in-depth project in which a student conducts research or produces a product related to the student’s major field. Requires a 3.500 GPA. May be repeated without limit.

BNSC 4990. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

BNSC 4991. Research. 4 Hours.
Offers an opportunity to conduct research under faculty supervision.

BNSC 4993. Independent Study. 1-4 Hours.
Offers independent work under the direction of members of the department on a chosen topic. May be repeated without limit.

Minor

- Behavioral Neuroscience (http://catalog.northeastern.edu/undergraduate/science/behavioral-neuroscience/behavioral-neuroscience-minor/)

Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (http://catalog.northeastern.edu/undergraduate/science/accelerated-bachelor-graduate-degree-programs/#programstext)
BNSC 4994. Internship. 4 Hours.
Offers students an opportunity for internship work. May be repeated without limit.