

NEUROSCIENCE B.S.

All students must meet the Degree and University Requirements.

All students must meet the Catamount Core Curriculum Requirements.

All students must meet the College Requirements.

MAJOR REQUIREMENTS

At least 44 credits in major courses, plus 18-24 credits in ancillary courses, including:

Requirement Description	Credits
FUNDAMENTAL COURSES. At least 21 credits.	
PSYS 1400 Intro to Psychological Science	3
BIOLOGY. Choose 1 of the following:	4-8
Option A:	
BCOR 1400 & BCOR 1450 Exploring Biology 1 and Exploring Biology 2	
Option B:	
BIOL 1000 & BIOL 1005 AP Biology 1 and AP Biology 2	
Option C:	
BIOL 1000 & BCOR 1425 AP Biology 1 and Accelerated Biology	
Option D:	
BIOL 1400 & BIOL 1450 Principles of Biology 1 and Principles of Biology 2	
CHEMISTRY.	8
CHEM 1400 & CHEM 1450 General Chemistry 1 and General Chemistry 2	
CALCULUS I. Choose 1 of the following:	3-4
MATH 1212 Fundamentals of Calculus I	
MATH 1234 Calculus I	
CALCULUS II: Choose 1 of the following:	3-4
MATH 1224 Fundamentals of Calculus II	
MATH 1242 Transitional Calculus	
MATH 1248 Calculus II	
FOUNDATION COURSES. At least 20 credits.	
NSCI 2100 Exploring Neuroscience w/lab	4
BCOR 2300 Genetics	3

ORGANIC CHEMISTRY. Choose 1 of the following:	4-8
Option A:	
CHEM 1580 Intro Organic Chemistry w/lab	
Option B:	
CHEM 2580 & CHEM 2585 Organic Chemistry 1 and Organic Chemistry 2	
Choose 1 of the following:	3
PSYS 2100 Learning, Cognition & Behavior	
PSYS 2200 Biopsychology	
CSD 3810 Intro Cognitive Neuroscience	
EXPERIMENTAL DESIGN AND STATISTICS.	
Choose 1 of the following:	3-4
PSYS 2002 Psych Research Methods (recommended)	
PSYS 2000 Psych Research Methods w/lab	
Choose 1 of the following:	3-4
PSYS 2010 Statistics for Psych Sci w/lab	
PSYS 2012 Statistics for Psych Sci	
STAT 1410 Basic Statistical Methods 1	
SENIOR CAPSTONE. 3 credits.	
NSCI 4500 Diseases of the Nervous System	3
ELECTIVES. At least 18 credits.	
CATEGORY A: Behavioral/Cognitive. 2 additional courses/6-8 credits from the following:	6-8
PSYS numbered 3100 to 3249	
CSD 2010, CSD 3480, CSD 3620	
CATEGORY B: Cellular/Molecular. 2 additional courses/6-8 credits from the following:	6-8
(BCOR 2500 or BCOR 2505), BIOL 3510, BIOL 3500, BIOL 3530, NSCI 3220, NSCI 3230, NSCI 3250, NSCI 3500, NSCI 3610, PHRM 3010, PHRM 3900	
PSYS numbered 3250 to 3299	
1 additional course/3-4 credits from Category A or Category B	3-4
3 additional credits from the following, in any combination:	3
the Category A list	
the Category B list	
Undergraduate Research: NSCI 2995 or NSCI 3995	
Honors: NSCI 4996	

Research credits in other related disciplines may be applied with the approval of the Neuroscience Director.	
Additional courses, including graduate-level NSCI courses, may be accepted as electives with prior approval from the Neuroscience Directors. Graduate courses are often open to upper-level undergraduate students with instructor permission.	

RESTRICTIONS

Students completing the B.S. in Neuroscience may not also receive the B.A. in Biology, the B.A. in Psychological Science, or the B.A. in Neuroscience.

OTHER INFORMATION

In the College of Arts and Sciences (CAS), only one course may overlap between a major and a minor or between two CAS majors.

Courses for the major and/or its pre/co-requisites that are cross-listed in the catalog or schedule of courses under another course prefix may be taken under that other prefix and still count for these requirements.

With the approval of the chair/director, courses that applied to the major in previous years but have since been deactivated may be applied to this year’s major requirements if they are reactivated.

For a Bachelor of Science degree, no more than 50 credits in courses with the same departmental prefix may be used toward completion of the 120 credits required for graduation.

At least half of the credits used to complete major requirements must be taken at the University of Vermont.