NEUROSCIENCE, B.S.

Requirements

Code	Title	Hours
Required Courses from BIO/PSY/NEU		**24-26**
Biology:		
BIO 150 & 150L	Biology I and Biology I Lab	4
BIO 160 & 160L	Biology II and Biology II Lab	4
Psychology:		
PSY 151	Introductory Psychology	3
Neuroscience:		
NEU 200	Introduction to Neuroscience	3
NEU 220	Survey of Neuroscience and the Humanities	3
NEU 354 & 354L	Neuroscience Methods and Neuroscience Methods Lab	4
or BIO 354 & 354L	Methods in Neuroscience and Neuroscience Methods Lab	
NEU 389	Neuroscience Seminars	3
Research		
NEU 391	Research in Neuroscience	2
Elective Courses		**12-14**
Biology Electives		*6-8*
Two courses must be selected from the following:		
BIO 301	Topics in Biology (if the course is related to neuroscience)	3-4
BIO 302	Topics in Biology (if the course is related to neuroscience)	3-4
BIO 303	Topics in Biology (if the course is related to neuroscience)	3-4
BIO 304	Topics in Biology (if the course is related to neuroscience)	3-4
BIO 305	Topics in Biology (if the course is related to neuroscience)	3-4
BIO 306	Topics in Biology (if the course is related to neuroscience)	3-4
BIO 323 & 323L	Animal Behavior and Animal Behavior Lab *	3-4
BIO 324	Hormones and Behavior	3
BIO 339	Animal Cognition	3
BIO 343	Molecular Neuroscience	3
BIO 346 & 346L	Neurobiology and Neurobiology Lab	3-4
BIO 352	Developmental Neuroscience	4
BIO 353	Functional Neuroanatomy	3
BIO 361	Principles of Biological Microscopy	4
BIO 363 & 363L	Sensory Biology and Sensory Biology Lab	3-4
BIO 374	Neuropharmacology **	3
Psychology Electives		
One course must be chosen from the following:		
PSY 220	Biopsychology	3
PSY 221	Cognitive Psychology	3
PSY 222	Psychopharmacology **	3
PSY 223	Social Affective Neuroscience	3
PSY 241	Developmental Psychology	3
PSY 263	Stress and Coping	3
PSY 264	Abnormal Psychology	3
One course must be chosen from the following:		
PSY 321	Seminar in Cognitive Psychology	3
PSY 325	Seminar in Perception	3
PSY 327	Seminar in Physiological Psychology	3
PSY 334	Seminar in Animal Behavior *	3
PSY 352	Research in Learning Theory	3
Co-requirements		
CHM 111 & 111L	College Chemistry I and College Chemistry I Lab	4
STA 111	Elementary Probability and Statistics	3
CSC 111	Introduction to Computer Science	4
Choose two of the following:		

* Either BIO 323 or PSY 334 may count towards the major, but not both.
** Either BIO 374 or PSY 222 may count towards the major, but not both.

For the B.S. major, the schedule of courses is flexible. After completing PSY 151, BIO 150, BIO 150L, BIO 160, and BIO 160L, students should begin taking NEU core courses. It is recommended that all prospective majors take CHM 111 and CHM 111L in the fall of the first year and complete BIO 150 and BIO 150L and STA 111 or an equivalent course during either the fall or spring of the first year. Students pursuing the B.S. in neuroscience with an interest in a health profession career are additionally advised to take CHM 122 and CHM 122L in the spring of the first year. These students should select additional co-requirements after consulting with a health professions adviser.

A maximum of two hours of 390-sequence courses may be counted as hours in the major, but an additional six hours may be taken and applied toward graduation as elective hours.

Code	Title	Hours
Any CHM course at the 100- level or above, except CHM 108, 301, 381, 390, 391, or CHM 395		
CSC 112	Fundamentals of Computer Science	4
CSC 201	Data Structures and Algorithms	3
CSC 231	Programming Languages	3
ECN 319	Behavioral Economics	3
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 117	Discrete Mathematics	4
PHY 113 & 113L	General Physics I and General Physics Lab	4
PHY 114 & 114L	General Physics II and General Physics II Lab	4
PHY 115	The Physics of Music	4

PHY 123 & 123L	General Physics I - Studio Format and General Physics I - Studio Format Lab	4
PHY 124 & 124L	General Physics II - Studio Format and General Physics II - Studio Format Lab	4
STA 112	Introduction to Regression and Data Science	3

Honors

Highly qualified majors are invited by the program to apply for admission to the honors program in neuroscience. To be graduated with the distinction “Honors in Neuroscience,” a graduating student must have a minimum GPA of 3.0 in all courses and a 3.3 in elective BIO, NEU and PSY courses. In addition, the student must submit an honors paper describing his or her independent research project, written in the form of a scientific paper. Students interested in pursuing an honors degree must obtain preapproval from the Honors Program Coordinator during the fall of the senior year. Upon completion of all requirements, a recommendation of honors at graduation will be made by the department based upon the student’s overall academic record and the quality of the final project.

Specific details regarding the requirements for the honors program, deadlines, and writing of the honors thesis, may be obtained from the Director or Associate Director of the Neuroscience Program and can be found on the program website.