

NEUROSCIENCE MINOR

The Neuroscience minor is designed for students going into graduate studies in neuroscience, animal behavior, psychology or medicine. Students develop a strong background of how the nervous system works, from the social and behavioral to the cellular and molecular levels. Beyond core requirements, students may focus on topics of specific interest in the very broad field of neuroscience. Research experience in neuroscience is required, and students must apply to be accepted to the neuroscience minor.

Application

Students must complete an application and qualify for the neuroscience minor. Applications can be submitted any time after their first year of college (30 credit hours must be completed in residency at the University of South Carolina, Columbia Campus). Normally, students will be expected to have at least a 3.30 UofSC system grade point average. Applications will be evaluated by the co-directors of the Neuroscience Minor and they will be judged on overall academic merit. Application forms can be obtained from the Departments of Psychology and Biological Sciences and from the neuroscience minor web page.

Degree Requirements (18 Hours)

Eighteen credit hours are required to satisfy the minor. Students must complete the required three credit Introduction to Neuroscience course and 2-3 credit hours of neuroscience research experience under an independent study number. Additional honors courses or other specialized courses in the neurosciences may also satisfy the minor requirements provided the course substitutions are approved by the co-directors of the neuroscience minor. No more than a total of six credits of independent study credits may count towards the minor.

Required Prerequisites (These courses may apply to a student's Carolina Core or College Requirements.)

Course	Title	Credits
BIOL 101	Biological Principles I	3
PSYC 101	Introduction to Psychology	3
Total Credit Hours		6

Required for the Minor (3 Hours)

Course	Title	Credits
PSYC 455	Introduction to Neuroscience	3
Total Credit Hours		3

Research Requirement (2-3 Hours)

The independent research can be done under any major independent research codes as long as the research is in the field of neuroscience, and is approved by the co-directors of the neuroscience minor. Examples include:

Course	Title	Credits
BIOL 399	Independent Study	1-6
PSYC 498	Advanced Independent Study	1-6
PSYC 598	Individual Research	3
PSYC 599	Individual Research	3

SCHC 399	HNRS: Independent Study	3-15
BMEN 499	Independent Research	1-3

Electives (12-13 hours)

Select courses from the following list. In addition, one three credit independent study in neuroscience may count in the Elective group. Sometimes Honors courses and special topics courses in neuroscience are offered and these are approved on a semester by semester basis by the co-directors of the neuroscience minor.

Note that many of the courses below have prerequisites and/or co-requisites. Course instructors can always give permission to take the course without the listed prerequisites and/or co-requisites and you should consult with individual instructors if you think that you have an adequate background and would like to take the course.

Course	Title	Credits
ANTH 361	Becoming Human	3
BIOL 302	Cell and Molecular Biology	3
BIOL 302L	Cell and Molecular Biology Laboratory	1
BIOL 405	Cellular and Molecular Neurobiology	3
BIOL 460	Advanced Human Physiology	3
BIOL 534	Animal Behavior	3
BIOL 534L	Animal Behavior Laboratory	1
BIOL 614	Stem Cell Biology	3
BIOL 634	Biology of Neurological Diseases	3
BIOL 635	Neurophysiology	4
BMEN 321	Biomonitoring and Electrophysiology	3
CSCE 555	Algorithms in Bioinformatics	3
ELCT 220	Electrical Engineering for Non-Majors	3
EXSC 351	Acquisition of Motor Skills	3
PHIL 351	Mind and Nature	3
PSYC 370	Psychology of Consciousness	3
PSYC 400	Survey of Learning and Memory	3
PSYC 405	Cognitive Psychology	3
PSYC 450	Sensation and Perception	3
PSYC 503	Psychology of Drug Use and Effects	3
PSYC 507	Cognitive Neuroscience	3
PSYC 560	Advanced Topics in Neuroscience	3
PSYC 570	Neuroscience Laboratory	3
PSYC 571	Cognitive Neuroscience Laboratory	3