

Neuroscience Major and Minor

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Neuroscience is the study of the biological bases and consequences of behavior, with a special focus on the role of the nervous system in these processes. The field has emerged during the past three decades as part of the explosive growth of interest in the biology of the brain and its contribution to understanding and treating neurological and psychiatric disorders. The neuroscience major provides a rigorous, interdisciplinary education in the biological and behavioral sciences, and is suitable for students planning to continue their education in a graduate program, or university settings, or in public and private industry. Additional biology courses may be required.

Required courses for the Neuroscience major

The neuroscience major requires the completion of 59 credits distributed as follows. Equivalent University Honors College courses may be substituted for any of the courses listed below.

Core courses

NROSCI 1000 Introduction to Neuroscience
NROSCI 1011 Functional Neuroanatomy
NROSCI 1012 Neurophysiology
NROSCI 1017 Synaptic Transmission
NROSCI 1049 Research Topics in Neuroscience

Two advanced elective courses

NROSCI 1014 Speaking of Science
NROSCI 1028 Signaling Pathways in Synaptic Plasticity
NROSCI 1030 Psychiatric Disorders and Brain Function
NROSCI 1032 Functional Org of the Human Nervous System
NROSCI 1033 Neural Basis of Vision
NROSCI 1034 Neural Basis of Cognition
NROSCI 1036 Neurobiology of Aging
NROSCI 1038 Research in Behavioral Neuroscience
NROSCI 1039 Processing in Neural Circuits
NROSCI 1040 Biological Bases of Learning and Memory
NROSCI 1041 Developmental Neurobiology
NROSCI 1042 Neurochemical Basis of Behavior
NROSCI 1027 Neuroscience Pro Seminar
NROSCI 1901 Independent Study (4 credits)
NROSCI 1962 Thesis Research Writing Practicum
Natural Sciences Research

Corequisite courses

Biological Science courses
BIOSC 0150 Foundations of Biology

Mathematics course

MATH 0220 Analytic Geometry and Calculus 1

Physics courses

PHYS 0110 Introduction to Physics 1

PHYS 0111 Introduction to Physics 2

Grade requirements

A grade of B- or better is required in NROSCI 1000. A minimum GPA of 2.0 in the core, advanced elective, and co-requisite courses is required for graduation.

Satisfactory/No Credit option

NROSCI 1049 is the only course that counts toward the major and may be taken on an S/NC basis.

Declaring the major

In order to declare the neuroscience major, a student must have completed BIOSC 0150, BIOSC 0160, CHEM 0110, and CHEM 0120 with a grade of C or better.

Advising

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