

Neuroscience Major Requirements

Have you ever wondered how a fly avoids a flyswatter, how a fish navigates the currents, how caffeine affects your brain, or how primates like you maintain complex social networks? All of these questions fall within the broad domain of neuroscience. Neuroscience is the study of the relationships between mind, brain and behavior from the cellular up through the organismal levels. It is an interdisciplinary major that combines biological, physical, chemical and psychological perspectives to better understand neuron structure and function and how neurons work together to create behavior, thought, and emotion in humans and non-human animals.

A major in Neuroscience consists of a minimum of 15 courses from the Departments of Psychology, Biology, Chemistry and Mathematics.

Psyc 101*	General Psychology
Psyc 215*	Experimental Methods
Psyc 216	Learning
Psyc 327	Neuroscience
Psyc 365	Perception and Cognition
Psyc 430	Behavioral Endocrinology
Biol 152*	How Life Works II
Biol 230	Molecular and Cellular Biology
Biol 326	Animal Physiology
Biol 365	Genetics
Biol 498	APEX
Math 108	Statistics
Chem 120	General Chemistry I
Chem 121	General Chemistry II
Chem 220	Organic Chemistry

Students considering Neuroscience as a major are encouraged to seek a mentor/advisor in the program before making any final decision. Acceptance as a major is contingent on a student passing Psychology 101 and 215, and Biology 152 with a grade of C or better. A pre-requisite for enrolling in Psychology 215 is a C or better in Psychology 101.

Additional courses outside the major may be useful for those students considering graduate study or professional work in specific specialty areas within the field. For example, students interested in applying to graduate programs in cellular neuroscience should take course work in physics, biochemistry, developmental biology, immunology and advanced molecular biology. Students planning to pursue opportunities in cognitive neuroscience would be advised to complete additional coursework in mathematics, computer science, and philosophy. Those interested in animal behavior and psychobiology should consider taking evolution, animal behavior and vertebrate biology.