Neuroscience

Overview

Website: sewanee.edu/academics/neuroscience/

A minor in neuroscience allows students to consider how brain-function relates to behavior, and to explore one of the most compelling scientific frontiers in understanding ourselves and our actions. The minor examines the nervous system and its contribution to our experiences through a truly interdisciplinary approach. Students are required to take courses in both psychology and biology, and are highly encouraged to explore related courses within chemistry, computer science, and philosophy.

The goal of the neuroscience minor is to encourage students to critically evaluate how the brain functions from the molecular and cellular level, and how these processes affect behavior. The neuroscience minor is ideal for students with an interest in any neuroscience-related field. The minor prepares students for graduate study in neuroscience or related fields, and is also a good preparation for those planning to pursue a career in medicine and related disciplines.

Faculty

Professors Bachman, Berner, Miles, Peterman, Yu

Associate Professors Bateman, Pongdee, B. Seballos, Shibata, A. Summers, Zigler

Assistant Professors Cammack, Kikis, Tiernan

Minor

Requirements for the Minor in Neuroscience

The minor requires successful completion of the following:

Course Requirements		
BIOL 133	Introductory Molecular Biology and Genetics	4
PSYC 100	Introduction to Psychology (Lab)	4
or PSYC 101	or Principles of Psychology	
Select at least three of the following:		12
PSYC 217	Motivation and Cognitive Control	
PSYC 225	Cognitive Neuroscience	
PSYC 254	Introduction to Behavioral Neuroscience	
PSYC 349	Drugs and Behavior	
PSYC 355	Affective Neuroscience (Lab)	
PSYC 359	Advanced Behavioral Neuroscience (Lab)	
Select at least one of the following:		4
BIOL 233	Molecular Cell Biology	
BIOL 300	Biology of Aging (Lab)	
BIOL 307	Mechanistic Biochemistry (Lab)	
BIOL 316	Biochemistry of Metabolism and Molecular Biology (Lab)	
BIOL 318	Molecular Revolutions in Medicine	
BIOL 325	Biology of Aging	
BIOL 328	Molecular Revolutions in Medicine (Lab)	
BIOL 330	Immunology (Lab)	
BIOL 331	Immunology	
BIOL 333	Developmental Biology (Lab)	
BIOL 388	Epigenetics	
BIOL 389	Epigenetics (Lab)	
BIOL 490	Principles of Neuroscience	
BIOL 492	History of Modern Neuroscience	
CHEM 120	General Chemistry (Lab)	
CHEM 150	Advanced General Chemistry (Lab)	

CHEM 202	Organic Chemistry II (Lab)	
CHEM 307	Mechanistic Biochemistry (Lab)	
CHEM 316	Biochemistry of Metabolism and Molecular Biology (Lab)	
CHEM 417	Advanced Biochemistry	
CSCI 290	Data Mining	
CSCI 356	Artificial Intelligence	
PHIL 235	Medical Ethics	
PSYC 208	Cognitive Psychology	
PSYC 357	Child Development (Lab)	
PSYC 358	Cognitive Psychology (Lab)	
PSYC 414	The Social Brain	
PSYC 419	Addiction	
PSYC 421	Sex, Brain, and Behavior	
PSYC 483	Cognitive Neuroscience	
PSYC 490	Principles of Neuroscience	
PSYC 491	Neurobiology of Emotion	
PSYC 492	History of Modern Neuroscience	
Total Semester Hours		**24**