



Course Requirements Minor in Neuroscience

Entrance Requirements - To apply you must already have a grade of C- or higher in:		
BSCI170	Principles of Molecular & Cellular Biology	
CHEM131/132	Fundamentals of General Chemistry	
NEUR200/ PSYC202	Introduction to Neuroscience	

Five Required Courses (one from each group A-E)			Prerequisites
A	PSYC300	Research Methods (4)	PSYC100, PSYC200
B	NEUR405	Neurobiology Lab (4)	NEUR306 or BSCI353, PHYS132
	PSYC407	Behavioral Neurobiology Laboratory (4)	NEUR200/PSYC202, PSYC300
	PSYC417	Data Science for Psychology and Neuroscience Majors (4)	PSYC200, PSYC300, MATH120 or MATH140
C	PSYC304	Biological Psychology (3)	PSYC100, BSCI170
	PSYC406	Neuroethology (3)	PSYC301 or NEUR200/PSYC202
	BSCI446	Advanced Systems Neuroscience (3)	BSCI353 or NEUR306
D	PSYC403	Animal Behavior (3)	PSYC100, NEUR200/PSYC202
	PSYC302	Fundamentals of Learning and Behavior (3)	PSYC100, BSCI170
	BSCI360	Principles of Animal Behavior (3)	BSCI160, BSCI170 & BSCI222
E	PSYC409	Topics in Neuroscience Seminar (1)	Permission of Department

No more than 2 courses can count towards both the minor and your major
PSYC304 can only be a required course or elective but not both
Check Testudo for current prerequisites

Elective Courses (2 courses for 6-8 credits)			Prerequisites
BSCI338	Special Topics Courses in Biology		By Permission Only
BSCI440	Mammalian Physiology		BSCI331, CHEM231/232
CMSC421	Introduction to Artificial Intelligence		CMSC351, CMSC330 & Permission of Department
HESP300	Intro to Psycholinguistics		HESP202 or Permission of Department
HESP305	Anatomy & Physiology of the Speech Mechanism		HESP202 or Permission of Department
HESP311	Anatomy, Pathology & Physiology of the Auditory System		HESP202 or Permission of Department
HESP407	Bases of Hearing Science		HESP311 or Permission of Department
HESP422	Neurological Bases of Human Communications		HESP305 or Permission of Department
KNES385	Motor Control and Learning		BSCI201, MATH113, & Permission of Department
KNES445	Exercise & Brain Health		KNES350
KNES462	Neural Basis of Human Movement		BSCI201, BSCI202, KNES385 or Permission of Department
LING240	Language and Mind		LING200
NEUR305	Neural Systems and Circuits		MATH120, NEUR200/PSYC202 or BSCI353
NEUR306	Cellular and Molecular Neuroscience		NEUR200/PSYC202 or BSCI207 or BSCI330 or BSCI330, prior or concurrent enrollment in PHYS132
PSYC207/ PSYC307	Collective Behavior and Decision-Making in Human and Animal Groups		NEUR200/PSYC202, PSYC304 or PSYC221
PSYC210	Personality and Temperament: Developmental Origins, Brain Bases, and Clinical Implications		PSYC100

Minor in Neuroscience Course Requirements

PSYC304	Biological Psychology	PSYC100 & BSCI170
PSYC310	Perception	PSYC100 & BSCI170
PSYC341	Introduction to Memory and Cognition	PSYC200 & PSYC300
PSYC404	Neuropharmacology	NEUR200/PSYC202
PSYC411	Introduction to Functional Magnetic Resonance Imaging	PSYC200, NEUR200/PSYC202 & PSYC300
PSYC414	Science of Sleep and Biological Rhythms	PSYC301, PSYC202/NEUR200 or Permission of Instructor
PSYC417	Data Science for Psychology and Neuroscience Majors	PSYC200, PSYC300, MATH120 or MATH140 or MATH136
PSYC440	Experimental Psychology: Cognitive Processes	PSYC100, PSYC200, PSYC300, & PSYC341
PSYC442	Psychology of Language	PSYC300 & PSYC341
PSYC489 G	Hormones and Behavior	BSCI330 or BSCI331 or NEUR200/PSYC202
PSYC489 R/ PSYC431	Human and Animal Intelligence	PSYC100 & PSYC300

Additional courses may be considered for elective credit – consult with the Neuroscience faculty advisor.

Elective Graduate Courses		Permission of Instructor, Department & College Required
NACS641	Introduction to Neurosciences (4)	
NACS642	Cognitive Neuroscience	
NACS643	Computational Neuroscience	
NACS644	Cellular and Molecular Neuroscience	
NACS728 Y	Introduction to Cognitive Science	
PSYC764	Comparative Neuroanatomy	

Undergraduate students pursuing a minor in neurosciences must complete a "Permission to Enroll in a Graduate class" form and obtain all of the required signatures in order to enroll in a graduate class (500-700 level). Students can get permission for a graduate-level class on a case-by-case basis with the approval of the instructor, advisor, department, and college offering the course. Each college has a form for this purpose.

Research Opportunities

Research Assistantships - Student may have the opportunity to participate as a research assistant in a neurosciences laboratory for an elective (e.g. BSCI 399, PSYC 479). Must be an independent research project. Permission of Minor in Neurosciences Faculty Advisor is required.

Honors Thesis - A student in a Departmental Honors Program may conduct a thesis in Neurosciences for their program's requirement. Consult with a faculty advisor for more information.

Applying to the Minor in Neuroscience

Visit: <https://psyc.umd.edu/undergraduate/neuroscience-minor> to download the application.