



Course Requirements Minor in Neuroscience

Entrance Requirements - To apply you must already have a grade of C- or higher in:	
BSCI170/171	Principles of Biology (formerly BSCI105)
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	PSYC100, PSYC200
B	NEUR405	Neurobiology Lab (4)	TBD
	PSYC407	Behavioral Neurobiology Laboratory (4)	NEUR200/PSYC202, PSYC300
	PSYC417	Data Science for Psychology and Neuroscience Majors (4)	PSYC200, PSYC300, MATH120, 130 or 140
C	PSYC304	Biological Psychology	PSYC100, NEUR200/PSYC202, BSCI170 and BSCI171
	PSYC406	Neuroethology (3)	NEUR200/PSYC202
	BSCI446	Neural Systems (3)	BSCI330
D	PSYC403	Animal Behavior (3)	PSYC100, NEUR200/PSYC202
	PSYC302	Fundamentals of Learning and Behavior (3)	PSYC100, BSCI170/171
	BSCI 360	Principles of Animal Behavior (3)	BSCI160/161, BSCI170/171, BSCI222
E	PSYC409	Topics in Neuroscience Seminar (1)	Permission of Instructor & Department

Note: No more than 2 courses can count towards both the minor and your major.

Elective Courses (2 courses for 6-8 credits)		Prerequisites
BSCI338	Special Topics Courses in Biology	By Permission Only
BSCI440	Mammalian Physiology	BSCI330, 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	HESP313 or Permission of Department
HESP422	Neurological Bases of Human Communications	HESP305 or Permission of Department
KNES385	Motor Control and Learning	Permission of Department
KNES445	Exercise & Brain Health	KNES350
KNES462	Neural Basis of Human Movement	BSCI201/202 & KNES385
LING240	Language and Mind	
NEUR305	Neural Systems and Circuits	MATH140, NEUR200, NEUR200/PSYC202 or PSYC301
NEUR306	Cellular and Molecular Neuroscience	NEUR200/PSYC202 or BSCI330, prior or concurrent enrollment in PHYS132 or equivalent
PSYC207	Collective Behavior and Decision-Making in Human and Animal Groups	PSYC100
PSYC210	Personality and Temperament	PSYC100
PSYC304	Biological Psychology	NEUR200/PSYC202, BSCI170 and BSCI171

Minor in Neuroscience Course Requirements Handout

PSYC310	Perception	BSCI170/171, CHEM131/2 or PHYS121
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	PSYC100 & NEUR200/PSYC202
PSYC417	Data Science for Psychology and Neuroscience Majors	PSYC200, PSYC300, MATH120, MATH140 or MATH136
PSYC440	Experimental Psychology: Cognitive Processes	PSYC100, PSYC200, PSYC300 & PSYC341
PSYC442	Psychology of Language	PSYC300 & PSYC341
PSYC489G	Hormones and Behavior	NEUR200/PSYC202 or PSYC304
PSYC489R	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	
NACS728Y	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://go.umd.edu/NeuroscienceMinor> to download the application.