



BACHELOR OF SCIENCE IN NEUROSCIENCE

The UNO Departments of Psychology & Biology offers an undergraduate degree in Neuroscience. For more information, please contact the Neuroscience advisor Dr. Jeffrey French at 554-2558; jfrench@unomaha.edu or the Psychology Department at 554-2581. Also, please visit our website at www.unomaha.edu/neuroscience/

NEUROSCIENCE CURRICULUM

In addition to the general education requirements of the College of Arts & Sciences for graduation, the following courses are required for a B. S. in Neuroscience.

REQUIRED FUNDAMENTALS COURSES

<i>Students must complete the following course for a total of 22 hours</i>			
NEUR 1500	Introduction to Neuroscience	PSYC 1010 and BIOL 1020 or BIOL 1450 prereq	3 cr. hr.
PSYC 1010	Introduction to Psychology		3 cr. hr.
PSYC 3130	Statistics		3 cr. hr.
PSYC 3140	Methods		3 cr. hr.
BIOL 1450	Biology I		5 cr. hr.
BIOL 1750	Biology II		5 cr. hr.
BIOL 2140	Genetics		4 cr. hr.
(Calculus is strongly recommended as a Fundamentals course, and may be a prerequisite for advanced courses in Neuroscience)			
<i><u>Either</u> of the following pairs of natural science courses with labs (or equivalents at higher level) for a total of 10 hours</i>			
CHEM 1140/1144	Fundamentals of College Chemistry		5 cr. hr.
CHEM 2210/2214	Fundamentals of Organic Chemistry		5 cr. hr.
PHYS 1110/1154	General Physics I		5 cr. hr.
PHYS 1120/1164	General Physics II		5 cr. hr.

<i>At least one of the following Lecture Courses</i>			
BIOL/PSYC 4270	Animal Behavior		3 cr. hr.
PSYC 4230	Behavioral Neuroscience		3 cr. hr.
PSYC 4320	Hormones and Behavior		3 cr. hr.
NEUR 4000	Advanced Neuroscience		3 cr. hr.
<i>At least one of the following Laboratory Courses</i>			
NEUR 4200	Neuroscience Laboratory		3 cr. hr.
PSYC 4234	Behavioral Neuroscience Lab		3 cr. hr.
BIOL/PSYC 4280	Animal Behavior Lab		3 cr. hr.

SUPPORTING NEUROSCIENCE COURSE

Students must complete at least 12 credit hours that have not already fulfilled an above requirement, from either Block I or II below. At least 3 credits must come from Block I and 3 credits from Block 2. The remaining minimum of 6 credits can be taken from either Block 1 or 2.

<i>Neuroscience Electives Block I: Molecular & Cellular Neuroscience</i>			
BIOL 3020	Molecular Biology of the Cell		3 cr. hr.
BIOL 4140	Cellular Biology		4 cr. hr.
BIOL 4730	Endocrinology		3 cr. hr.
BIOL 4740	Animal Physiology		4 cr. hr.
BIOL 4850	Developmental Biology		4 cr. hr.
BIOL 4030	Special Topics	(Neuroscience content)	3 cr. hr.
<i>Neuroscience Electives Block II: Integrative Behavioral Neuroscience</i>			
PSYC 4070	Cognitive Psychology, or		3 cr. hr.
PSYC 4090	Cognitive Neuroscience		3 cr. hr.
PSYC 4210	Sensation & Perception		3 cr. hr.
PSYC 4270	Animal Behavior		3 cr. hr.
PSYC 4230	Behavioral Neuroscience		3 cr. hr.
PSYC 4250	Limits of Consciousness		3 cr. hr.
PSYC 4320	Hormones & Behavior		3 cr. hr.
PSYC 4440	Abnormal Psychology		3 cr. hr.
PSYC 4920	Special Topics	(Neuroscience content)	3 cr. hr.

NEUR-BIOL double major. Students will be allowed to get a double major in B.S. NEUR and B.A.BIOL. There are many additional courses in PSYC required for the B.S. in NEUR, plus students would need four semesters of foreign language to qualify for the B.A. in BIOL.

NEUR-PSYC double major. Beyond the REQUIRED FUNDAMENTAL COURSES, students will not be allowed to double count courses toward both majors. For example, students would not be able to use Animal Behavior and Animal Behavior Lab to count toward both majors. However, if a student used AB/ABL to satisfy PSYC lec-lab sequence, the student could use BN/BNL to satisfy the requirements for NEUR lec/lab sequence. Likewise, a student could use Cognitive Psychology (DELETED from block I) to satisfy upper-division PSYC, and Cognitive Neuroscience to satisfy Block II course credits.