

NEUROSCIENCE

Degree offered: Bachelor of Science

Minor: No

Note: During the 2010-2011 academic year, we adopted a new set of requirements for the major which represent a significant departure from the previous requirements. They are correctly listed in the 2011-2012 catalogue and at the Neuroscience website <http://www.rhodes.edu/academics/1586.asp>

For your convenience I have added the complete list at the end of this entry.

Courses required for majors and appropriate for beginning students:

- Biology 130, 131L Biology I. **Recommended** for the Fall semester, 1st year. (F7)
- Biology 140, 141L Biology II. **Recommended** for the Spring semester, 1st year.
- Psychology 150 Foundational Issues of Psychology. **Recommended** the for Fall or Spring semester, 1st year. (F8)
- Chem 120, 120L Foundations of Chemistry (F7)

We also **recommend** that students try to take Neur 270 and Psych 211 in their second year (both are offered both semesters).

Latest time to begin a major and graduate on schedule:

- Sophomore year because of the sequential nature of the major and competition for seats in the Biology and Psychology courses with their majors.

Courses that close quickly:

- Note: In general Biology courses close quickly – this is particularly true for Bio 304.

Courses that don't count toward the major:

- Biology 105, 200, 201, 202, 206, 209, 212, 214, 240, 250, 252-254, 301, 315, 330, 350, 360, 380, 460
- Psychology 105, 222, 225, 230, 309, 311, 323, 338, 350-352, 399, 460

Requirements for the Neuroscience major:

Core requirements (all):

Chem	120-120L	Foundations of Chemistry		
Bio	130-131L	Biology I		
Bio	140-141L	Biology II		
Psyc	150	Foundational Issues In Psychology		
Psyc	211	Statistical Methods		
Neur	270	Neuroscience	(prerequisite: Bio 130 and 140, or Psyc 150)	
Neur	350	Neuroscience Research Methods	(prerequisite: Neur 270)	
Neur	485/486	Senior Seminar		

Depth requirements (Bio 375 and either Neur 318 or Psyc 345 required):

Bio	375	Neuroendocrinology	(prerequisite: Bio 130 and 140)	
Neur	318	Neuroscience of Brain Disorders	(prerequisite: Neur 270)	
Psyc	345	Cognitive Neuroscience	(prerequisite: Neur 270 or Psyc 200 and 211)	

If a student chooses to take all three Depth courses, the third may be used to fulfill a Breadth requirement.

Breadth requirements (choose 3):

Bio	204	Mechanisms of Development	Psyc	216	Perception
Bio	207	Animal Behavior	Psyc	220	Psychology of Health
Bio	304	Genetics	Psyc	224	Psychological Disorders
Bio	307	Cell Biology	Psyc	306	Language and Communication
Bio	325	Molecular Biology	Psyc	327	Cognitive Processes
Bio	340	Animal Physiology	Psyc	353	Psychophysiology Research Methods
Chem	414	Biochemistry	Neur	451/452	Independent Research
Chem	416	Mechanisms of Drug Action	Phil	328	Philosophy of Mind and Consciousness

Courses recommended but not required

Chem	211-212	Introduction to Organic Chemistry I and II (<u>with laboratory</u>)
CS	141	Computer Science I: Programming Fundamentals
Math	115	Applied Calculus
Phys	111-112	Fundamentals of Physics I and II (<u>with laboratory</u>)
Pol Sci	216	Introduction to the Philosophy of Law