Neuroscience (BS)  
(Neurobiology Concentration)

Major Academic Director: Lori Holt (email: loriholt@cmu.edu); Undergraduate Coordinator: Emilie O'Leary (BH 339)

Neuroscience is an interdisciplinary field in which scientists from many backgrounds apply the tools of biology, cognitive science, psychology, chemistry, mathematics, statistics, computer science, and engineering to develop a comprehensive understanding of brain function at the level of molecules, neurons, brain circuits, cognitive brain modules, and behavior.

The goal of this interdisciplinary program between the Dietrich College and the Mellon College of Science is to provide an intensive interdisciplinary education to enable outstanding students to become leaders in identifying and solving tomorrow's Neuroscience problems using a variety of methods. There are three concentration areas: Neurobiology; Cognitive Neuroscience; Computation Neuroscience. Students may complete only one concentration.

This is a suggested schedule for the 2 years for a Primary Major.

**Suggested Plan for Neuroscience with Neurobiology concentration:**

1st semester
- Complete 2:  76-101, Interpretation & Argument  
   79-104, Global Histories  
   Freshman Seminar  
- 99-101 or 99-102, C@CM  
- 03-121, Modern Biology  
- 21-120, Diff. & Integral Calculus*  
- 09-105, Intro to Modern Chem. I+

2nd semester
- Complete 1:  76-101, Interpretation & Argument  
   79-104, Global Histories  
   Freshman Seminar  
   36-201 or 36-200 - Statistics**  
- 21-122, Int., Diff., Equ., & Approx.  
- 09-106, Modern Chemistry II  
- 03-161, Molecules to Mind

3rd semester
- 03-220, Genetics  
- 85-211, Cognitive Psychology  
- 09-217, Organic Chemistry I  
- 09-207, Techniq. in Quant. Analy.  
- 33-111, Physics for Sci. St. I

4th semester
- 03-231, Biochemistry I  
- xx-xxx, Neuroscience Elective++  
- xx-xxx, Neurobiology Elective+++  
- GenEd***  
- GenEd***

*If required to start with 21-111, complete 21-112, then 21-122.
**Suggested alternative statistics course for this major: 36-247, Statistics for Lab Sciences (prereq: 21-120).
***Elective: This space can be used for a pre-requisite course, another GenEd course, major course, or for a course you are interested in.

+ It is essential to start with the chemistry course, 09-105, in the first semester
++Recommended Neuroscience Electives  +++Recommended Neurobiology Electives

Academic Advisory Center (5/12/2017)