

# Neuroscience Major (BS)

## **Biology Faculty**

**Professor: David Thomas**

**Associate Professor: Cassia Oliveira and Maryline Jones**

**Assistant Professors: Alexander Beeser and Eric South**

## **Psychology Faculty**

**Associate Professor: Jennifer Daniels**

**Assistant Professors: Britt Florkiewicz, Robert Miller, Allison Sonia, and Nikki Yonts**

The Neuroscience major provides students with a foundational understanding of the biology and function of the nervous system and brain. The major offers courses spanning topics from the intricate processes that control neural activity to the anatomy and function of brain regions and the intersection of neurobiology and behavior. True to the liberal arts experience, the Neuroscience major draws from several academic disciplines, and students in the major will take many courses in biology and psychology as well as neuroscience as they develop their understanding of how the brain and nervous system produce the mind and behavior. The program also emphasizes research methodology, data analysis, and statistics as it pertains to the study of the nervous system and behavior.

## Summary of Requirements for a Major in Neuroscience

| <b>Item #</b> | <b>Title</b>                              | <b>Credits</b> |
|---------------|---|----------------|
| BIO 110       | Principles of Biology I                   | 4              |
| BIO 250       | Cell Biology                              | 4              |
| CHM 110       | General Chemistry I                       | 4              |
| CHM 120       | General Chemistry II                      | 4              |
| PSY 101       | Introduction to Psychology                | 3              |
| PSY 235       | Statistics for the Behavioral Sciences    | 3              |
| PSY 250       | Research Methods with Human Participants  | 3              |
| PSY 318       | Biological Psychology                     | 3              |
| PSY 335       | Abnormal Psychology                       | 3              |
| NEU 301       | Neuroscience Foundations                  | 3              |
| NEU 302       | Biological Basis of Perception & Movement | 3              |
| NEU 303       | Cognitive Neuroscience                    | 3              |
| NEU 401       | Clinical Neuropathology                   | 3              |
| NEU 490       | Senior Evaluation                         | 0              |
|               | Neuroscience Elective Courses             | 10-11          |

## CORE CURRICULUM

| <b>Item #</b> | <b>Title</b>  | <b>Credits</b> |
|---------------|---|----------------|
|               | Core Curriculum Requirements (In addition to Major hours) | 44-48          |
|               | <b>Total Credits</b>                                      | <b>97-102</b>  |

## Neuroscience Elective Courses

Select 3 courses, at least one from each group

## Group A

| <b>Item #</b> | <b>Title</b>           | <b>Credits</b> |
|---------------|------------------------|----------------|
| BIO 252       | Genetics               | 4              |
| BIO 352       | Molecular Biology      | 4              |
| BIO 356       | Biochemistry           | 4              |
| BIO 360       | Comparative Physiology | 4              |
| BIO 364       | Developmental Biology  | 4              |

## Group B

| <b>Item #</b> | <b>Title</b>                            | <b>Credits</b> |
|---------------|---|----------------|
| PSY 312       | Sensation & Perception                  | 3              |
| PSY 339       | Learning and Cognition                  | 3              |
| PSY 342       | Introduction to Cognitive Psychology    | 3              |
| PSY 353       | Introduction to Evolutionary Psychology | 3              |