

NEUROSCIENCE

The Neuroscience minor or Integrative Studies concentration is an interdisciplinary program designed to provide students with a comprehensive understanding of the nervous system's structure, development, and function. The curriculum consists of foundational and advanced courses that cover a broad spectrum of topics and emphasize the interdisciplinary nature of the field. Elective courses allow students to tailor the program to their specific interests in neurobiology, neurophysiology, psychological sciences, or cognitive neuroscience. Laboratory courses provide hands-on experience, fostering critical thinking and practical skills. Students are encouraged to participate in research projects and apply theoretical knowledge to real-world problems. This program is designed for students majoring in BBS (Behavioral and Biological Sciences), Psychology, Biology, and HHS (Health and Human Services (<https://umdearborn.edu/academics/program/health-and-human-services-bs/>)), and for students who wish to supplement their primary studies with a focused exploration of neuroscience. This program can also help students prepare for advanced studies in neuroscience, psychology, and related fields.

Code	Title	Credit Hours
Core Courses		
All of the following are required:		
BBS 400	Cognitive Neuroscience Laboratory ³	2
BIOL 350	Principles of Neurobiology and Neuroendocrinology ¹	4
BIOL 355	Integrative Neurobiology, Physiology and Endocrinology Lab ¹	2
PSYC 400	Cognitive Neuroscience ²	4
Electives		
Select one course from Option A or Option B:		3-4
Option A: Research experience courses with Neuroscience core faculty members		
BBS 499	Guided Research in Behavioral and Biological Sciences	
BIOL 492	Capstone Research Experience	
BIOL 498	Independent Study in Biology	
BIOL 499	Laboratory in Biological Resrh	
PSYC 492	Individual Research	
Option B: Other Electives		
BIOL 402	Physiology of Excitable Cells ⁴	
BIOL 480	Neurobiology of Brain Disorders ⁵	
PSYC 370	Behavioral Neuroscience ²	
PSYC 442	Child Psychopathology ²	
PSYC 455	Health Psychology ²	
PSYC 461	Learning and Memory ²	
PSYC 463	Sensation and Perception ²	
Total Credit Hours		15-16

⁵ Prerequisite(s): (BIOL 350 or BIOL 357 or BIOL 306 or BIOL 317)

- A minimum GPA of 2.0 is required for the minor/concentration. The GPA is based on all coursework required within the minor (excluding prerequisites).
- The use of transfer credit, field placements, internships, seminars, S/E graded courses, and independent study/research courses is limited to 3 credits in a 12 credit hour minor/concentration and 6 credits in a 15 credit hour and above minor/concentration.
- Courses within a minor/concentration cannot be taken as Pass/Fail (P/F).
- Minors requiring 12 credits may share one course with a major. Minors requiring 15 credits or more may share two courses with a major. This does not apply to concentrations for the Integrative Studies major.

¹ Prerequisite: BIOL 140

² Prerequisite: PSYC 101

³ Prerequisite: PSYC 400 (taken previously or concurrently)

⁴ Prerequisite(s): BIOL 130 and BIOL 140 and (BIOL 303 or BIOL 305 or BIOL 350 or BIOL 357)