

Neuroscience Major Requirements

Electives (3 units)

Some of these courses have additional prerequisites

Chemistry

- **CH241:** Analytical/Bioanalytical Chemistry
- **CH250:** Structures of Organic Molecules
- **CH251:** Reactions of Organic Molecules
- **CH382:** Biochemistry I
- **CH383:** Biochemistry II
- **CH480:** Protein Structure, Function, and Disease

Human Biology & Kinesiology

- **HK204:** Intro to Human Anatomy
- **HK321:** Human Physiology
- **HK354:** Advanced Head and Neck Anatomy

Molecular Biology

- **MB201:** Laboratory in Molecular and Cellular Biology and Genetics
- **MB231:** Genetics
- Any 300-level MB Course

Mathematics

- **MA256:** Mathematical Models in Biology

Physics

- **PC141:** Physics for the Life Sciences I
- **PC142:** Physics for the Life Sciences II
- **PC241:** Physics for the Physical Sciences I
- **PC241:** Physics for the Physical Sciences II

Psychology

- Any 300-level or 400-level PY course

Intro to Psychology (1 unit)

One of the following:

- **PY100:** Intro to Psychology
- **PY105:** Intro to Psychological Sciences
- AP (4 or 5) or IB (HL 5, 6, 7)

Molecular Biology (1 Unit)

- **MB131:** Molecular and Cellular Biology

Chemistry (2 Units)

- **CH107:** General Chemistry 1

- **CH108:** General Chemistry 2

Core Courses (3 Units)

- **PY197:** Principles of Neuroscience

- **PY297:** Systems Neuroscience

Methods I & 2 (2 units)

- **PY205:** Introduction to Methods Statistics

- **PY301-309:** Topics in Advanced Methods & Statistics

Mathematics and Computer Science (1 Unit)

One of the following:

- **MA120:** Applied Linear Algebra
- **MA125:** Pre-Calculus & Calculus
- **MA126:** Calculus I
- **CP115:** Computational Thinking
- **CP116:** Applied Python

Seminar Courses (2 Units)

2 of the following

- **PY408:** Topical Seminar (neuro only)

- **PY412:** Neuropsychology

- **PY419:** Neuroscience Methods

- **PY433:** Neuropharmacology

- **MB355:** Molecular Neurobiology

- **MB415:** Developmental Neurobiology

- **CH410:** Medicinal Chemistry

Research Presentation

Students must give an oral research presentation at the Psychology/Neuroscience Poster Day, CSURF, or other departmental or professional conference.

Research or internship experience can be a structured on-campus or off-campus research/internship experiences during the summer or school year. It can also be a research course from one of the following:

- PY251/451
- CH201/301/303/304/401/403/404
- HK350
- MB209/397/399/498

One of the following:

- **PY298:** Advanced Neuroanatomy
- **PY300:** Hormones and Behavior
- **PY300:** Computational Neuro