Majoring in Neuroscience at Lafayette

Advice for your first year

First semester	Second semester
NEUR 201	BIOL 112
PSYC 110 or CHEM 121	PSYC 120 or CHEM 122
MATH 125 or MATH 161	Common Core (CC) or elective
FYS	CC or elective

Note*

*Chemistry is recommended rather than Psychology for students planning to apply for medical school immediately after college. In that case, Psychology 110 and Psychology 120 can be taken during the Fall and Spring semester of their sophomore year, respectively. It is never recommended that students take more than two lab courses in a semester, particularly their first year of college. If a student has Advanced Placement credit for BIOL 112, Psychology 110 could be taken during their second semester freshman year along with Chem 122.

General Advice

We recommend you keep the following in mind when planning your trajectory as a Neuroscience major

- It is never recommended that students take more than two lab courses in a semester, particularly their first year of college.
- For students that have struggled with CHEM 121 we would recommend against taking CHEM 122 at the same time as BIOL 112
- It is recommended you take PYSC 120 during your first three semesters at Lafayette as it serves as a prerequisite to a number of the PSYC courses in the major.
- If possible you may want to consider not taking another lab course the same semester you take CHEM 221
- We recommend against taking NEUR 256 and NEUR 323 at the same time
- If you are planning on studying abroad please be cognizant of the fact that you likely will not be able to take courses that count towards the Neuroscience major while abroad. Coming up with a plan early in your college career to assure you can complete these classes outside this semester will make it easier to go abroad.

- **<u>BOTH</u>** NEUR 256 and NEUR 323 are prerequisites to NEUR 401. Therefore, you should make sure both classes are completed before the spring semester of your senior year.

About the B.S. Neuroscience Major

Neuroscience is an interdisciplinary field exploring the development, structure, and behavioral consequences of nervous systems. The B.S. Program in Neuroscience at Lafayette educates students to understand nervous systems from a variety of scientific perspectives. Within the major program, students have the freedom to create their own combination of electives that reflect their particular interests. The major consists of 16 courses distributed among foundation, core, and elective courses.

FOUNDATION COURSES

- BIOL 101 (General Biology I w/ lab)
- PSYC 110 (Introduction to Psychological Science w/ lab)
- PSYC 120 (Quantitative Methods in Psychology)
- CHEM 121 (Introductory Chemistry I w/ lab)
- CHEM 122 (Introductory Chemistry w/ lab)
- CHEM 221 (Organic Chemistry I w/ lab)[1]
- PHYS 111 (Mechanics & Thermodynamics, w/ lab)

(Note: As part of the Common Course of Study, Neuroscience Majors *must* take MATH 125 or 161)

CORE COURSES

- NEUR 201 (Intro to Neuroscience)
- NEUR 256 (Neurobiology w/ lab)
- NEUR 323 (Physiological Psychology w/ lab)
- NEUR 401 (Advanced Neuroscience)

MAJOR ELECTIVES

5 total courses from the approved list (Courses listed from 100-level to 300 level)

- CM 151 Introduction to Computational Science with lab
- Neur 205 Human Machine & Advances in Medical Technology
- Neur 255 Neuroscience of Music
- Neur 275 Art, Neuroscience & Consciousness
- Psyc 203 Design and Analysis I with lab
- Psyc 225 Psychopharmacology
- Psyc 256 Cognitive

- Psyc 232 Abnormal Psychology
- Biol 213 Comparative Vertebrate Anatomy with lab
- Biol 214 Neuroanatomy with lab
- Biol 251 Human Physiology with lab
- Biol 255 Molecular Genetics with lab
- Biol 278 Precision Medicine
- Biol 279 Quantitative Biology
- Phil 225 Philosophy of Mind
- Neur 351 Neurophysiology
- Neur 353 Neuroregeneration
- Psyc 321 Learning
- Psyc 322 Perception with lab
- Biol 310 Aging and Age related diseases
- Biol 314 Anatomy of Vision
- Chem 350 Survey of Biochemistry

ONE of the electives may come from a research course listed below:

- Neur 391/391 Independent Study
- Neur 491/492 Advanced Research
- Neur 495/496 Honors Thesis

(Note: Some of the courses may have additional pre-requisites that you will have to complete before enrolling in the course)