

Degree Requirements

Candidates for the degree in Biology with a specialized field of study in Neurobiology must complete the following requirements. All courses must be taken for a letter grade unless otherwise noted. Students in this field of study are required to have their checklist signed by their advisor and submitted to the Student Services Office by the end of their junior year. Students may petition **in advance** for the substitution of either equivalent or more advanced courses. Petitions are available in the department's Student Services Office. The Neurobiology field of study will be noted in the program section of the student's transcript.

1. Core Courses

BIOSCI 41 – Genetics, Biochemistry, and Molecular Biology
BIOSCI 42 – Cell Biology and Animal Physiology
BIOSCI or BIOHOPK 43 – Plant Biology, Evolution, and Ecology

2. Writing in the Major requirement

Students must fulfill their Writing in the Major requirement. This may be done by taking one of the following:

BIOSCI 44X – Core Experimental Laboratory
BIOSCI or BIOHOPK 44Y – Core Experimental Laboratory
BIOSCI 145* – Behavioral Ecology

BIOHOPK 175H* – Problems in Marine Ecology and Ecophysiology
BIOHOPK 176H* – Experimental Neurobiology

* Please note that this course can also count towards the elective requirement. See section 5 (below) for guidelines.

3. Required Foundational Breadth Courses

CHEM 31A and B (or 31X), 33, 35, 36, 130, 131
PHYSICS 21, 22, 23, 24; or 41, 43, 45
MATH 19, 20, 21; or 41, 42
STATS 60 or BIOSCI 141
(Students may take up to two foundational breadth courses with the CR/NC grading option.)

4. Required Biology Courses

BIOSCI 118 – Genetic Analysis of Biological Processes
OR BIOSCI 104 – Advanced Molecular Biology
BIOSCI 129A – Cellular Dynamics I: Cell Motility and Adhesion
OR BIOSCI 129B – Cellular Dynamics II: Building a Cell
BIOSCI 150 – Human Behavioral Biology
OR BIOSCI 163 – Neural Systems & Behavior
BIOSCI 154 – Molecular and Cellular Neurobiology
BIOSCI 158 – Developmental Neurobiology

5. Biology Electives

Electives must include 15 units of 100-level or above courses offered in the Department of Biology or from the list of approved out-of-department electives.

A. No more than 6 units from any combination of individual instruction courses (BIOHOPK 175H, 176H, 199H, BIOSCI 198/X, 199/X, 290, or 291) may be applied toward the total number of Biology elective units.

B. No more than one CR/NC course may be used to fulfill this requirement.

6. Research Requirements

Students in the Neurobiology field of study must fulfill the equivalent of the requirements for graduation with honors in Biology. In order to actually graduate with Honors students must submit a petition to the Undergraduate Research Coordinator.

A. 10 units of BIOSCI 199/X or BIOHOPK 199H (6 of these units may be applied toward Biology Electives)

B. Poster/Oral Presentation

C. Research Thesis

CORE COURSES: Letter-grade only	<input type="checkbox"/> 41 <input type="checkbox"/> 42 <input type="checkbox"/> 43					
WRITING IN THE MAJOR: Students must take <u>one</u> of the following courses.	<input type="checkbox"/> 44X or <input type="checkbox"/> 44Y or <input type="checkbox"/> 145* or <input type="checkbox"/> 175H* or <input type="checkbox"/> 176H* or (prior to Fall 05) <input type="checkbox"/> 54* or <input type="checkbox"/> 55* * Please note that this course can also count towards the elective requirement.					
REQUIRED FOUNDATIONAL BREADTH COURSES: Students may take up to two foundational breadth courses with the CR/NC grading option.	CHEMISTRY <input type="checkbox"/> 31A <input type="checkbox"/> 31B or <input type="checkbox"/> 31X <input type="checkbox"/> 33 <input type="checkbox"/> 35 <input type="checkbox"/> 36 <input type="checkbox"/> 130 <input type="checkbox"/> 131 or (prior to Fall 05) <input type="checkbox"/> 187* *May only fulfill one requirement. Students can use for foundational breadth OR elective credit.					
	PHYSICS <input type="checkbox"/> 21 <input type="checkbox"/> 22 <input type="checkbox"/> 23 <input type="checkbox"/> 24 or <input type="checkbox"/> 41 (53) <input type="checkbox"/> 43 (55) <input type="checkbox"/> 45 (51)					
	MATH <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 or <input type="checkbox"/> 41 <input type="checkbox"/> 42					
	ADDITIONAL FOUNDATIONAL BREADTH <input type="checkbox"/> BIOSCI 141* or <input type="checkbox"/> STATS 60 *May only fulfill one requirement. Students can use for foundational breadth OR elective credit.					
REQUIRED BIOLOGY COURSES: Letter-grade only	<input type="checkbox"/> 118 or <input type="checkbox"/> 104 <input type="checkbox"/> 129A or <input type="checkbox"/> 129B <input type="checkbox"/> 150 or <input type="checkbox"/> 163 or (prior to Fall 05) <input type="checkbox"/> PSYCH 202 <input type="checkbox"/> 154 <input type="checkbox"/> 158					
BIOLOGY ELECTIVES: 15 units Up to 6 units of research/teaching. One course may be taken CR/NC. See guidelines on Track Info Sheet for more information.	BIO ELECTIVES	UNITS	OUT-OF-DEPT	UNITS	RESEARCH and TEACHING	UNITS
	Total Units		Total Units		Total Units	
RESEARCH REQUIREMENTS:	<input type="checkbox"/> 10 Units of BIOSCI 199/X or BIOHOPK 199H (6 of these units can be used toward electives above) <input type="checkbox"/> Poster/Oral Presentation <input type="checkbox"/> Thesis					

Student's Name: _____

SU ID#: _____ Date: _____

Advisor's Signature: _____
 (Students: please complete checklist prior to meeting with your advisor.)

Unfinished Requirements:
