

BIOLOGY MAJOR (B.A.)

The B.A. in Biology (major code BIOA) is a program that provides a solid foundation in laboratory-based life sciences for students who are interested in integrating their study of biology with other disciplines including law, ethics, psychology, history, computer science, science writing or journalism, and education. The program is also of interest to students for expanding their understanding of this area of study that is increasingly important for informed citizenship, intelligent parenting, and life-long learning.

In addition to meeting the standards and requirements of the College of Arts and Sciences, degree candidates for B.A. in Biology must complete a minimum of 31 credits in biology, chemistry, and mathematics as well as 15 credits from the major elective courses listed below for a total of 46 credits. At least two major elective courses must be in Biology (BIOL), and no more than 4 credits of Biology electives may be in research, independent study, or Co-op courses.

Students pursuing the B.A. in Biology will follow the College of Arts and Sciences Core Curriculum requirements for B.A. students.

Link to College Core requirement (<http://catalogue.shu.edu/undergraduate/college-arts-sciences/core-curriculum/>).

B.A. Degree Requirements

Code	Title	Hours
BIOL 1211 & BIOL 1212	General Biology- Organisms and General Biology-Organisms Lab	4
BIOL 1222 & BIOL 1223	General Biology-Cell and General Biology-Cell Lab	4
BIOL 2221 & BIOL 2222	Genetics and Genetics Lab	4
Select one of the following: BIOL 2341		4
BIOL 3201 & BIOL 3202	Ecology and Stewardship and Ecology and Stewardship lab	4
BIOL 4199	Senior Biology Seminar	3
CHEM 1123 & CHEM 1124	General Chemistry I and General Chemistry II	6
CHEM 1125 & CHEM 1126	General Chemistry Lab I and General Chemistry II Lab	2
MATH 1401	Calculus I	4
BIOL XXXX	Biology Electives above 3000 *	6-8
Select seven to nine credits from the following BIOA Electives:		7-9
ANTH 1201	Introduction to Physical Anthropology	
CHEM 2321 & CHEM 2315	Organic Chemistry I and Organic Chemistry I-Lab	
CHEM 2322 & CHEM 2316	Organic Chemistry II and Organic Chemistry II-Lab	
CLAS 1314		
CSAS 1113	Computing for Science Majors	
ENGL 3514	Scientific and Technical Writing	
MATH 1411	Calculus II	
MATH 2111	Statistics for Science Majors	
PHIL 2700	Philosophy of Science	

PHYS 1701 & PHYS 1702	General Physics I and General Physics II
PHYS 1811 & PHYS 1812	Physics Laboratory I and Physics Laboratory II
PSYC 1101	Introduction to Psychology
PSYC xxxx	Psychology courses by advisement
SOCI 2224	Sociology of Health-Medicine or ANTH 222 Health and Medicine: An Anthropological Approach

Total Hours **44-48**

* Note: Some have prerequisites

A Model 4-Year Plan for the B.A. in Biology

Course	Title	Hours
First Year		
First Semester		
CORE 1001	University Life	1
CORE 1101	Journey of Transformation	3
BIOL 1211	General Biology- Organisms	3
BIOL 1212	General Biology-Organisms Lab	1
ENGL 1201	Core English I	3
MATH 1015 or MATH 1401	Pre Calc Math Alg and Trig or Calculus I	4
Hours		15
Second Semester		
BIOL 1222	General Biology-Cell	3
BIOL 1223	General Biology-Cell Lab	1
COST 1500	Foundations in Oral Rhetoric	2
ENGL 1202	Core English II	3
Select one of the following:		3-4
MATH 1401	Calculus I	
General Elective		
Arts & Sciences Core *		3
Hours		15-16
Second Year		
First Semester		
BIOL 2221	Genetics	3
BIOL 2222	Genetics Lab	1
CHEM 1123	General Chemistry I	3
CHEM 1125	General Chemistry Lab I	1
CORE 2101	Christianity and Cult in Dial.	3
Arts & Sciences Core *		3
Hours		14
Second Semester		
BIOL xxxx	Biology Elective (above 3000)	3-4
CHEM 1124	General Chemistry II	3
CHEM 1126	General Chemistry II Lab	1
Arts & Sciences Core *		3
General Elective		3
Hours		13-14
Third Year		
First Semester		
BIOL 2341		4
BIOA Elective		3
CORE 3XXX: Engaging the World		3
Arts & Sciences Core *		6
Hours		16

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Second Semester

BIOL xxxx	Biology Elective (above 3000)	3-4
BIOA Elective		3
Arts & Sciences Core *		6
General Electives		3
Hours		15-16

Fourth Year

First Semester

BIOL 4199	Senior Biology Seminar **	0-3
BIOA Elective		3
Arts & Sciences Core *		6
General Electives		6
Hours		15-18

Second Semester

BIOL 4199	Senior Biology Seminar **	0-3
BIOA Elective		3
Arts & Sciences Core *		3
General Electives		9
Hours		15-18

Total Hours 118-127

* Consult the College of Arts and Sciences Core Curriculum for information regarding these courses.

** Seniors will take Biology Senior Seminar in the Fall if they expect to graduate in December.