

BIOLOGY (B.S.)

Students interested in the study of the biological and biomedical sciences earn a B.S. in Biology. Students complete a minimum of 120 credits to earn a bachelor's degree, including 41–44 credits of core courses (<https://catalog.salve.edu/undergraduate/curriculum-degree-programs/>) and 74–78 credits (20 courses) in their major.

Code	Title	Credits
Major Requirements		
BIO-113	Biology I	4
BIO-114	Biology II	4
BIO-220	Cell Biology and Chemistry	4
BIO-253	Genetics: Classical, Molecular and Population	4
BIO-471	Biology Seminar	3
CHM-113	General Chemistry I	4
CHM-114	General Chemistry II	4
CHM-205	Organic Chemistry I	4
CHM-206	Organic Chemistry II	4
BCH-403	Biochemistry	4
STA-173	Statistical Methods	3
MTH-191	Applied Calculus	3-4
or MTH-195	Calculus I	
Select one of the following pairs of courses:		8
PHY-201	General Physics I	
& PHY-202	and General Physics II	
PHY-205	Principles of Physics I	
& PHY-206	and Principles of Physics II	
Additional Requirements		
Select one of the following options:		21-24
Six biology or biochemistry electives (21-24 credits) from the 200-level or above, at least four of which have laboratory associated with them.		
Five biology or biochemistry electives (18-20 credits) from the 200-level or above, at least three of which have laboratory associated with them AND 3 or more credits of Independent Research (BIO-497).		
Total Credits		74-78

Environmental Sciences Concentration Requirements

Students wishing to pursue an environmental science concentration will satisfy the requirements for a B.S. in Biology and the courses below. The courses for the concentration satisfy the elective requirements for the Biology major. Students complete a minimum of 120 credits to earn a bachelor's degree in Biology with an Environmental Science concentration: 49–51 credits of core courses (<https://catalog.salve.edu/undergraduate/curriculum-degree-programs/>) and 78 major credits (21 courses).

Code	Title	Credits
Required Courses		
CHM-310	Environmental Chemistry	4
BIO-255	Conservation Biology	3
BIO-260	Marine Biology	4

BIO-310	Ecology	4
Electives		
Select electives from the following: ¹		10-11
BIO-200	Botany	
BIO-210	Microbiology	
BIO-275	Tropical Biology	
BIO-278	Tropical Biology Field Experience	
BIO-320	Evolution	
BIO-390	Environmental Science Internship	
BIO-497	Undergraduate Research	
CHP-310	Introduction to Geographic Information Systems	
Total Credits		25-26

¹ At least one must have associated laboratory

The following courses are recommended:

Code	Title	Credits
CHM-305	Physical Chemistry I	4
CHM-306	Physical Chemistry II	4
CHM-309	Instrumental Analysis	4
CHM-407	Advanced Organic Chemistry	4
RTS-332	Care for Creation: Religion, Spirituality and the Environment	3
ENV-334	Environmental Justice	3
ENV-350	Natural Resource Management	3

Degree Plan for Biology (B.S.)

Course	Title	Credits
First Year		
Fall		
BIO-113	Biology I	4
CHM-113	General Chemistry I	4
STU-101	First Year Studio	1
WRT-105	College Writing and Research Intensive ¹	3
PHL-105	Finding Your Moral Compass ²	3
or RTS-105	or Faith, Mercy, Justice in the 21st Century	
Credits		15
Spring		
BIO-114	Biology II	4
CHM-114	General Chemistry II	4
PHL-105	Finding Your Moral Compass ²	3
or RTS-105	or Faith, Mercy, Justice in the 21st Century	
Core Course		3
Core Course		3
Credits		17
Second Year		
Fall		
BIO-220	Cell Biology and Chemistry ²	4
or BIO-253	or Genetics: Classical, Molecular and Population	
CHM-205	Organic Chemistry I	4
MTH-191	Applied Calculus	3-4
or MTH-195	or Calculus I	
STU-201	Sophomore Studio ³	1
Core Course		3
Credits		15-16
Spring		
BIO-220	Cell Biology and Chemistry ²	4
or BIO-253	or Genetics: Classical, Molecular and Population	

CHM-206	Organic Chemistry II	4
STA-173	Statistical Methods	3
Core Course		3
Credits		14
Third Year		
Fall		
BCH-403	Biochemistry	4
PHY-201 or PHY-205	General Physics I or Principles of Physics I	4
BIO or BCH Elective above 200-level		3
Core Course		3
Core Course		3
Credits		17
Spring		
PHY-202 or PHY-206	General Physics II or Principles of Physics II	4
BIO or BCH Elective above 200-level		3
BIO or BCH Elective above 200-level with Lab		4
Core Course		3
Credits		14
Fourth Year		
Fall		
BIO or BCH Elective above 200-level with Lab		4
BIO or BCH Elective above 200-level with Lab		4
Core Course		3
Elective		3
Credits		14
Spring		
BIO-471	Biology Seminar	3
BIO or BCH Elective above 200-level with Lab		4
BIO or BCH Elective above 200-level with Lab		4
Elective		3
Credits		14
Total Credits		120-121

¹ The first-year writing requirement may be fulfilled by completing WRT-105 in either the fall or spring semester. Alternately, a student may opt for the two-course sequence, completing WRT-102 in the fall and WRT-103 in the spring.

² One each semester

³ This weekend workshop may be taken in either the fall or spring semester of sophomore year.