

BIOLOGY MAJOR – B.S.

Summary

Code	Title	Credits
	Biology B.S. Major Requirements	60-65
	Integrative Core Curriculum Requirements ¹	29-41
	Electives	14-31
Total Credits		120

¹ See Integrative Core Curriculum requirements, with information about the H&S CLA requirement. (<https://catalog.ithaca.edu/undergrad/schools/school-humanities-sciences/#integrativecorecurriculumicctext>)

Degree Requirements

Code	Title	Credits
REQUIRED COURSES WITHIN THE DEPARTMENT		
BIOL 12100	Principles of Biology, Cell and Molecular	4
BIOL 12200	Principles of Biology, Ecology and Evolution	4
BIOL 22700	Genetics	4
BIOL 20700	Communicating Biology	3
BIOL 30200	Research in Biology	3
BIOL 41100	Biology Seminar	0.5
BIOL 41200	Biology: Seminar	0.5
Evolutionary/Ecological Perspective		
Select one of the following courses:		3-4
BIOL 22300	Biology of Oceanic Islands	
BIOL 22800	The Evolution of Adaptations	
BIOL 27100	General Ecology	
BIOL 32400	Wonderful Life: Genes, Evolution, and Biodiversity	
BIOL 47800	Evolution	
Cellular/Molecular Perspective		
Select one of the following courses:		4
BIOL 31500	Neurobiology	
BIOL 34500	Developmental Biology	
BIOL 35200	Microbiology	
BIOL 35400	Cell Biology	
BIOL 37300	Plant Physiology	
Biology Electives		
Four courses with Biology Elective Attribute "BIEL" that meet the following criteria:		14-16
-At least two electives must be 4-credit		
-At least one elective must be at level 3 or above		
-Courses may only count once in the major; if a BIEL course is used to fulfill any other major requirement, it cannot also be used as an Elective.		
REQUIRED COURSES OUTSIDE THE DEPARTMENT		
CHEM 12100 & CHEM 12200	Principles of Chemistry and Principles of Chemistry Laboratory or CHEM 12300Principles of Chemistry - Enriched Section	4
CHEM 12400	Experimental Chemistry I	2

CHEM 22100	Organic Chemistry I	3
MATH 14500	Statistics for the Health, Life, and Social Sciences	4

Choose two of the following four options: 7-9

CHEM 22200 & CHEM 22500	Organic Chemistry II and Experimental Chemistry II	
CHEM 23200	Quantitative Chemistry	
PHYS 10100	Introduction to Physics I or PHYS 117Principles of Physics I: Mechanics	
PHYS 10200	Introduction to Physics II or PHYS 118Principles of Physics II: Electricity and Magnetism	

Total Credits 60-65