

BIOLOGY (BS)

Exploration and Discovery

The BS in Biology prepares students for graduate or professional schools including medical, dental, and veterinary schools, and broadly prepares students in cellular, physiological, organismal, ecological and evolutionary biology. Note that some professional/graduate schools require a full year of physics and that students should work closely with their academic advisor to plan their coursework.

Degree Requirements

Course	Title	Credits
Major Requirements		
BI 1110	Biological Science I (TECO)	4
BI 1120	Biological Science II	4
BI 3060	Genetics	4
BI 3130	Evolution	4
BI 3240	Conservation (DICO,GACO,INCO)	3
BI 4970	Biology Seminar	1
CH 1050	Laboratory Safety	1
CH 2335	General Chemistry I (QRCO)	4
CH 2340	General Chemistry II	4
CH 3370	Organic Chemistry I	4
CH 3380	Organic Chemistry II	4
Lower Level Organismal Electives		
Complete two courses from the following:		8
BI 2030	Invertebrate Zoology	
BI 2040	Vertebrate Zoology	
BI 2070	Botany	
BI 2110 & BI 2130	Human Anatomy and Physiology I and Human Anatomy and Physiology Laboratory I	
BI 2120 & BI 2140	Human Anatomy and Physiology II and Human Anatomy and Physiology Laboratory II	
Upper Level Biology Electives		
Complete 19-20 credits of 3000/4000 level Biology courses (one must be a Writing in the Discipline Connection)		19-20
Physics		
PH 2410 & PH 2430 or PH 2130	University Physics I and University Physics Laboratory I or Physics I	4
Mathematics Foundations		
Complete one course from the following:		4
MA 2140	Precalculus (QRCO,TECO)	
MA 2490	Applied Calculus I (QRCO)	
MA 2550	Calculus I (QRCO)	
General Education (https://coursecatalog.plymouth.edu/general-education)		
EN 1400	Composition	4
IS 1111	The First Year Seminar: Critical Thinking and the Nature of Inquiry	3
CTDI	Creative Thought Direction	3-4
PPDI	Past and Present Direction	3-4
SSDI	Self and Society Direction	3-4

Directions (choose from CTDI, PPDI, SSDI) ¹	4-8
WECO Wellness Connection	3-4
Electives	20-21
Total Credits	120

¹ Directions should total 16-17 credits because SID1 is waived for BS Biology.

Recommended Course Sequence

Check all course descriptions for prerequisites before planning course schedule. Course sequence is suggested but not required.

Course	Title	Credits
Year One		
EN 1400	Composition	4
IS 1111	The First Year Seminar: Critical Thinking and the Nature of Inquiry	3
Complete one Mathematics Foundations Course from the following:		4
MA 2140	Precalculus (QRCO,TECO)	
MA 2490	Applied Calculus I (QRCO)	
MA 2550	Calculus I (QRCO)	
BI 1110	Biological Science I (TECO)	4
BI 1120	Biological Science II	4
CH 1050	Laboratory Safety	1
CH 2335	General Chemistry I (QRCO) ¹	4
CH 2340	General Chemistry II ¹	4
Elective		2
		Credits
		30
Year Two		
Complete two Lower Level Organismal Elective Courses from the following:		8
BI 2030	Invertebrate Zoology	
BI 2040	Vertebrate Zoology	
BI 2070	Botany	
BI 2110 & BI 2130	Human Anatomy and Physiology I and Human Anatomy and Physiology Laboratory I	
BI 2120 & BI 2140	Human Anatomy and Physiology II and Human Anatomy and Physiology Laboratory II	
BI 3060	Genetics	4
CH 3370	Organic Chemistry I	4
CH 3380	Organic Chemistry II	4
CTDI (https://coursecatalog.plymouth.edu/general-education/#CTDI)	Creative Thought Direction	3-4
PPDI (https://coursecatalog.plymouth.edu/general-education/#PPDI)	Past and Present Direction	3-4

2 *Biology (BS)*

SSDI (<https://coursecatalog.plymouth.edu/general-education/#SSDI>) Self and Society Direction 3-4

Credits 29-32

Year Three

BI 3000/4000 level Biology courses 15-16

BI Biology Writing Connection 4

Complete one course from the following: 4

PH 2410 & PH 2430 University Physics I and University Physics Laboratory I

PH 2130 Physics I

Directions (choose from CTDI, PPD, SSDI) (<https://coursecatalog.plymouth.edu/general-education>)² 4-8

Credits 27-32

Year Four

BI 3130 Evolution 4

BI 3240 Conservation (DICO,GACO,INCO) 3

BI 4970 Biology Seminar 1

WECO (<https://coursecatalog.plymouth.edu/general-education/#WECO>) Wellness Connection 3-4

Electives 18-19

Credits 29-31

Total Credits 120

¹ General Chemistry should only be taken in the first year if the student has suitable math skills.

² Directions should total 17-16 credits because SIDI is waived for BS Biology.