

Major Progress Tracker: Biological Sciences

Name	PS #	Date
TARGET GRADUATION DATE:		

BIOSC COURSES Must total a minimum of 32 credits			
You must earn a grade of <u>C</u> or higher in all Biology courses			
Core Courses	Cr	Grade	Notes
005X Foundations Bio Lab 1	1		
006X Foundations Bio Lab 2	1		
0150 Foundations Bio 1 (JHC0155)	3		
0160 Foundations Bio 2 (JHC0165)	3		
0350 Genetics	3		
0370 Ecology or 1130 Evolution	3		
1000* Biochemistry	3		
Electives^ (min 14 credits)	Cr	Grade	Notes
	3		
	3		
	3		
(HL* Elective)	3		
(Elective Lab #1)	1		
(Elective Lab #2 ^o)	1		
Capstone	Cr	Grade	Notes
1010 Comm in Bio Sci (WRIT) ⁺	2		
TOTAL	32		

NOTES	
* Biochemistry	Can substitute BIOSC 1810 + 1820. 1820 will count as HL elective. Cannot take 1000 and 1810/1820.
[^] Electives	See next page for approved electives in NROSCI and CHEM
[*] Higher Level Courses	See next page for information
^o Elective Lab #2	Can use a Pymatuning Field Course to satisfy 2 nd lab requirement.
+ BIOSC 1010 Pre-reqs	Students must complete 16 credits of BIOSC before taking BIOSC 1010.

General Education Requirements (Fall 2018 & later)

Wrkshp Comp _____ Sem in Comp _____

Writ #1 _____ Writ #2 _____ (in BIOSC)

Algebra _____ Quant Formal Reas. _____

2nd Language _____

Diversity Course _____

The Diversity course may be used to fulfill another General Education Requirement.

Division Requirements (Humanities, Arts, Social Sciences, Natural Sciences)

Literature _____

The Arts _____

Creative Work _____

Philosophical Thinking/Ethics _____

Social Science _____

Historical Analysis _____

Natural Sciences Fulfilled by Major

Global Awareness & Cultural Understanding

Global Issues _____

Geographic Region _____

Cross-Cultural Awareness _____

120 TOTAL credits required for degree	Date	Co-req GPA	BIOSC GPA
	See p.2 for GPA calculation details		

CO-REQUISITES

You must average a 2.000 GPA in your co-requisite courses.

CHEMISTRY				MATH				PHYSICS			
								Take 1 sequence (alg OR calc)			
CHEM #	Cr	Grade	Notes	COURSE #	Cr	Grade	Notes	PHYS #	Cr	Grade	Notes
0110 Gen Chem 1*	4			MATH 0220 (Calc 1)	4			0110 Physics 1 (alg)	3		
0120 Gen Chem 2*	4			2 nd :	4			0111 Physics 2 (alg)	3		
0310 Org Chem 1	3			2 nd math options: MATH 0230, STAT 1000 STAT 0200 is NOT useable for the major MATH 0235 = MATH 0220 + 0230				0174 Physics 1 (calc)	4		
0320 Org Chem 2	3							0175 Physics 2 (calc)	4		
0345/0745 Org Chem Lab	2							0212 or 0219 (lab) ⁺	2		

*must include lecture and lab for General Chemistry sequence

⁺Lab is not needed for major but is required for medical and some health-related grad schools.

To complete elective, Higher Level elective, and lab elective credits for the BIOSC major, see below:

For BIOSC electives to complete major, see Biological Sciences Course List at: biology.pitt.edu/undergraduate/courses

Up to 6 credits of the following may be also used as BIOSC electives:
NROSCI 1000, 1003(UHC), 1012, 1017; CHEM 1830.

BIOSC 1690 and 1900-1909 are not usable as elective credits for major.

The following course pairs are considered to be repeats due to the amount of overlapping materials. Students may take **only one** course from each pair.

- BIOSC/NROSCI 1070 (UHC Human Physiology) OR BIOSC/NROSCI 1250 (Human Physiology)
- BIOSC 1140 (Behavioral Ecology) OR BIOSC 1440 (Animal Behavior)

Some labs are restricted to specialty major students and are not open to Biological Sciences students. These include:

- BIOSC 1830: Biochemistry Lab. Biological Sciences alternative: BIOSC 1005: Intro to Biochemistry Lab.
- BIOSC 1860: Microbiology Lab. Biological Sciences alternative: BIOSC 1855: Intro to Microbiology Lab.
- BIOSC 1950: Molecular Genetics Lab. Biological Sciences alternative: BIOSC 0352: Intro to Molecular Genetics Lab.

Higher Level (HL) Electives

Courses that have a prerequisite of BIOSC 0150/0160 + an upper-division course

Course offerings and timings may vary from year to year.

Check the Master Course List on [this page](#) for up-to-date info.

BIOSC #	Course Name	Pre-req	Cr
1120	Biostatistics	BIOSC 0350/0370/1000 + STAT 1000	3
1130	Evolution	BIOSC 0350	3
1275	Genomics	BIOSC 0350	3
1280	Microbial Genetics	BIOSC 0350 + 1850	3
1320	Population Biology	BIOSC 0370	3
1400	Disease Ecology	BIOSC 0370	3
1435	Environ. Phys. of Animals	BIOSC 0370	3
1440	Animal Behavior	BIOSC 0370	3
1445	Animal Communication	BIOSC 0370	3
1455	Human Endocrinology	BIOSC 1250	3
1470	Biophysical Chemistry	BIOSC 1000 or 1810	3
1500	Cell Biology	BIOSC 1000 or 1810	3
1520	Developmental Biology	BIOSC 0350	3
1730	Virology	BIOSC 0350 +1000 + 1850 or instructor permission	3
1760	Immunology	BIOSC 0350, suggest 1000	3
1820	Metabolic Pathways	BIOSC 1810	3
1865	Microbial Physiology	BIOSC 1850 + 1000/1810	3
1940	Molecular Biology	BIOSC 0350 + 1000/1810	3
1945	Adv. Molec. Biology	BIOSC 1940	3
1998	Beneficial Microbes	BIOSC 1850	3
1999	Medical Microbiology	BIOSC 1850	3
NROSCI 1012	Neurophysiology	NROSCI 1000 + CHEM 0120 + MATH 0220 + PHYS 0212. NROSCI minor or instructor permission.	3
NROSCI 1017	Synaptic Transmission	NROSCI 1000. NROSCI minor or instructor permission.	3

Grade and GPA Requirements:

- a) **You must have** a grade of "C" or better in your 32 credits of Biology courses for the BIOSC major - this means no C- or lower in a BIOSC course will be allowed for the major. However, a C-, D+, D, D- can count towards your total 120 credits for the bachelor's degree, and is averaged into your BIOSC GPA.
- b) **AND** an overall BIOSC GPA (32 plus any extra BIOSC credits) of 2.000 or better.
- c) **AND** your corequisite GPA (chem, math, phys) must average to 2.000 or better. [Thus, a grade lower than C in Math, Chemistry or Physics can be used if the co-req GPA still averages to 2.000. See **exceptions** below.]
 - **Exceptions:**
 - i. Students must earn a grade of C (not C-) or better in CHEM 0110 and CHEM 0120 for the major.
 - ii. Students must earn a grade of C (not C-) or better in PHYS 0110/0174 to enroll in PHYS 0111/0175.
 - iii. Students must earn a grade of C (not C-) or better in MATH 0220 to enroll in MATH 0230.
- d) To receive the **chemistry minor**, you must earn at least a 2.000 average GPA in the corequisite chemistry courses and BIOSC 1000/1810, AND at least half of the chemistry credits must be earned at the Pittsburgh Campus. Only CHEM 0110 and CHEM 0120 can be taken on a S/NC basis, all other classes for the minor need to be taken for a letter grade.

Calculating your GPA - The Bio advisors have a GPA calculator spreadsheet – ask and we'll send it to you.