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 or higher</u> 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 (UHC0155) | 3 | | | | | |
| 0160 Foundations Bio 2 (UHC0165) | 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 #2º) | 1 | | | | | |
| Capstone | Cr | Grade | Notes | | | |
| | _ | | | | | |
| 1010 Comm in Bio Sci (WRIT) ⁺ | 2 | | | | | |

| 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 | | | | |
| ° 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. | | | | |

TOTAL 32

| 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 |
| <u>Division Requirements (Humanities, Arts, Socia</u> <u>Sciences, Natural Sciences)</u> |
| Literature |
| The Arts |
| Creative Work |
| Philosophical Thinking/Ethics |
| Social Science |
| Historical Analysis |
| Natural Sciences <u>Fulfilled by Major</u> |
| Global Awareness & Cultural Understanding |
| Global Issues |
| Geographic Region |

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

Cross-Cultural Awareness___

| 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) | ფ | | |
| 0120 Gen Chem 2 | 4 | | | 2 nd : | 4 | | | 0111 Physics 2 (alg) | ფ | | |
| 0310 Org Chem 1 | 3 | | | 2nd math options: MATH 0230, STAT 1000 | | | 0174 Physics 1 (calc) | 4 | | | |
| 0320 Org Chem 2 | 3 | | | STAT 0200 is NOT useable for the major | | | 0175 Physics 2 (calc) | 4 | | | |
| 0345/0745 Org Chem Lab | 2 | | | MATH 0235 = MATH 0220 + 0230 | | | 0212 or 0219 (lab) ⁺ | 2 | | | |
| [†] Lab is not needed for major but is required for medical and some health-related grad schools | | | | | | | | | | | |

Major Progress Tracker: Biological Sciences

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: NROSC 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 <u>only</u> <u>one</u> 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. | 3 |
| | | NROSCI minor or instructor permission. | |
| NROSCI 1017 | Synaptic Transmission | NROSCI 1000. | 3 |
| | | NROSCI minor or instructor permission. | |

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 <u>corequisite GPA (chem, math, phys)</u> 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 <u>at least</u> 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.