

Biology (BA)

Bachelor of Art (BA)

This degree map is based on the 2023-24 Academic Catalog and is subject to change. Students should meet with their academic advisor each semester and use Degree Works to monitor their individual progress toward degree completion. The time it takes to earn a degree will vary based on several factors including summer/winter enrollment, dual enrollment and number of courses successfully completed each semester. We recommend taking a minimum of 15 credits each fall and spring semester.

Sample 4-Year Plan

First Year			
Fall Courses	Credits	Spring Courses	Credits
BIOL 110 Principles of Biology 1	4	BIOL 111 Principles of Biology 2	4
STAT 141 Introduction to Statistics or MATH 150 Essentials of Calculus	3	CHEM 121 General Chemistry 1	4
General Education Course	3	General Education Course	3
General Education Course	3	General Education Course	3
First Year Seminar	3		
Semester Total	16	Semester Total	14
Second Year			
Fall Courses	Credits	Spring Courses	Credits
BIOL 211 Cell Biology	4	BIOL 209 Genetics	3
CHEM 122 General Chemistry 2	4	CHEM 231 Condensed Organic Chemistry or PHYS 208 Physics 1	4
BIOL 201 Introduction to Biological Research	3	General Education	3
General Education	3	General Education	3
		General Education	3
Semester Total	14	Semester Total	16
Third Year			
Fall Courses	Credits	Spring Courses	Credits
BIOL 301 Ecology	4	Biology Elective	3
Biology elective	3	Biology Elective	4
General Education Course	3	Free elective	3
General Education Course	3	Free elective	3
General Education Course	3	Free elective	3
Semester Total	16	Semester Total	16
Fourth Year			
Fall Courses	Credits	Spring Courses	Credits
Biology Elective	4	Biology Elective	3
Biology Elective	4	Biology Elective	3
Free elective	3	Free elective	3
Free elective	3	Free elective	3
		Free elective	2
Semester Total	14	Semester Total	14

Winter/Summer College - Optional

While not required, Winter and Summer sessions are offered each year and may help you stay on track or get ahead. You may take up to seven (7) credits during Winter College and up to 14 credits during Summer College.

Curriculum Checklist

Biology Core Requirements (22 credits)

- ___ BIOL 110 Principles of Biology 1 (4)
- ___ BIOL 111 Principles of Biology 2 (4)
- ___ BIOL 201 Intro to Bio Research (3)
- ___ BIOL 209 Genetics (3)
- ___ BIOL 211 Cell Biology (4)
- ___ BIOL 301 Ecology (Fall only) (4)

Related Core Requirements (15 credits)

- ___ CHEM 121 General Chemistry 1 (4)
- ___ CHEM 122 General Chemistry 2 (4)
- ___ CHEM 231 Condensed Organic Chem OR PHYS208 Intro to Physics 1 (4)
- ___ STAT 141 Intro to Statistics OR MATH 150 Essentials of Calculus (3)

Electives (16 credits)

Choose 5-6 courses at 200-level or above; *at least three electives must have a lab; maximum of 3 credits of BIOL 493 or BIOL 498 can be used – these experiences do not count as “course with a lab”. *Designates course with a lab

- ___ *BIOL 206 Botany (3)
- ___ *BIOL 207 Zoology (3)
- ___ BIOL 208 Human Genetics (3)
- ___ *BIOL 210 Genetics Laboratory (3)
- ___ BIOL 213 Intro to Parasitology (3)
- ___ BIOL 215 Investigations in Genetics and Molecular Biology (2)
- ___ *BIOL 252 Watershed Ecology Tech (3)
- ___ *BIOL 314 Comparative Bio of Inverts (3)
- ___ *BIOL 316 Vertebrate Histology (3)
- ___ BIOL 337 Basic Virology (3)
- ___ *BIOL 340 Microbiology (3)
- ___ *BIOL 354 Medical Microbiology (3)
- ___ BIOL 350 Plant Pathology (3)
- ___ *BIOL 400 Dendrology (3)
- ___ *BIOL 401 Entomology (3)
- ___ *BIOL 419 Ecosystems (3)
- ___ BIOL 420 Global Change Bio (3)
- ___ BIOL 430 Evolution (3)
- ___ *BIOL 431 Mycology (3)
- ___ BIOL 432 *Ornithology (3)
- ___ BIOL 433 *Ichthyology (3)
- ___ BIOL 434 *Herpetology (3)
- ___ BIOL 435 Conservation Genetics (3)
- ___ BIOL 438 Environmental Policies (3)
- ___ *BIOL 439 *Hum Dim in Fisheries Mg (3)
- ___ *BIOL 440 *Mg of Sm. Impoundments (3)
- ___ *BIOL 441 *Mg of Lg Impoundments (3)
- ___ BIOL 442 Advanced Virology (3)
- ___ BIOL 443 Molecular Biology (3)
- ___ *BIOL 444 *Molecular Biology lab (1)
- ___ BIOL 445 Pharmacology (3)
- ___ BIOL 446 Immunology (3)
- ___ *BIOL 447 Immunology lab (1)
- ___ *BIOL 448 Advanced Parasitology (3)
- ___ *BIOL 450 Developmental Biology (3)
- ___ BIOL 451 Conservation Biology (3)
- ___ *BIOL 452 Freshwater Ecology (3)
- ___ *BIOL 453 Freshwater Entomology (3)
- ___ *BIOL 454 Algae of Freshwater Eco (3)
- ___ *BIOL 455 Community Ecology (3)
- ___ BIOL 456 Enviro Toxicology (3)
- ___ *BIOL 460 Plants, Animals, Nat. His. Of PA (3)
- ___ *BIOL 461 Animal Behavior (3)
- ___ BIOL 462 Cancer Biology (3)
- ___ BIOL 465 Medical Genomics (3)
- ___ BIOL 466 Bioinformatics (3)
- ___ *BIOL 470 Tissue Culture (3)
- ___ BIOL 473 Environmental Physiology (3)
- ___ BIOL 474 Human Physiology (3)
- ___ BIOL 475 Animal Cell Physiology (3)
- ___ BIOL 476 Neurophysiology (3)
- ___ BIOL 477 Plant Physiology (3)
- ___ BIOL 479 Comparative Animal Physiology (3)
- ___ *BIOL 480 Integrated Physiology lab (1)
- ___ BIOL 485 Senior Seminar (1)
- ___ BIOL 486 Analysis & Comm of Bio Data (3)
- ___ BIOL 493 Independent Research (1-6 crs)
- ___ BIOL 498 Internship in Biology (3-6 crs)

General Education Requirements (45 credits)

Note: Some requirements may be fulfilled by coursework in your major program including directed Gen Ed courses noted below

- Foundations (15 credits)
 - MATH 150; STAT 141 (3)
- Interconnections (9 credits)
- Citizenship & Responsibility (6 credits from at least two goals)
- Natural World & Technologies (9 credits)
 - BIOL 110 Principles of Biology I (4)
 - CHEM 121 General Chemistry 1 (4)
- Creativity & Expression (6 credits)

Degree Requirements

All students must obtain a minimum of 120 credits, complete all General Education requirements, and all requirements for the selected major. Meet with your advisor and consult Degree Works to monitor your progress and for all graduation requirements.

A minimum GPA of 2.0 in the major and overall are required.

Campus Locations

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|-------------------|--|
| Bloomsburg | <input type="checkbox"/> Online; <input checked="" type="checkbox"/> In-person; <input type="checkbox"/> Blended |
| Lock Haven | <input type="checkbox"/> Online; <input checked="" type="checkbox"/> In-person; <input type="checkbox"/> Blended |
| Mansfield | <input type="checkbox"/> Online; <input checked="" type="checkbox"/> In-person; <input type="checkbox"/> Blended |
| Clearfield | <input type="checkbox"/> Online; <input type="checkbox"/> In-person; <input type="checkbox"/> Blended |

Revised April, 2023