Bachelor of Science in Biology

The Bachelor of Science in Biology degree has five basic components:

1. General Education and Institutional Requirements (some may also be included in program requirements)
2. Biology program requirements in Chemistry, Physics, and Mathematics
3. Biology major core courses
4. Upper-division Biology elective courses
5. Electives: college-level courses from any prefix to meet Graduation Requirements (p. 3)

DSU General Education & Institutional Requirements

All DSU General Education and Institutional requirements must be fulfilled. A previously earned degree may fulfill those requirements, but courses must be equivalent to DSU's minimum General Education standards in American Institutions, English, and Mathematics.

Code	Title	Hours
Institutional Requirement in Computer Literacy (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		
Computer Literacy		0-6
General Education Core Requirements (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		
English		3-7
Information Literacy		0-1
Mathematics		3-5
American Institutions		3-6
Life Sciences		3-10
Physical Sciences		3-5
Laboratory Science		0-1
Fine Arts		3
Literature/Humanities		3
Social & Behavioral Sciences		3
Exploration		3-5
Two (2) Global & Cultural Perspectives Courses		0-6
Biology Program Requirements		
CHEM 1210 & CHEM 1215	Principles of Chemistry I and Principles of Chemistry I Lab	5
CHEM 1220 & CHEM 1225	Principles of Chemistry II and Principles of Chemistry II Lab	5
CHEM 2310 & CHEM 2315	Organic Chemistry I and Organic Chemistry I Lab	5
CHEM 2320 & CHEM 2325	Organic Chemistry II and Organic Chemistry II Lab	5
MATH 1210	Calculus I	4
Complete one of the following series of courses:		
Series 1:		
PHYS 2010 & PHYS 2015	College Physics I and College Physics I Lab	5
PHYS 2020 & PHYS 2025	College Physics II and College Physics II Lab	5
Series 2:		
PHYS 2210 & PHYS 2215	Physics/Scientists Engineers I and Physics/Scientists Engineers Lab	5
PHYS 2220 & PHYS 2225	Physics/Scientists EngineersII and Physics/Scientists Engineers II Lab	5
Biology Core Requirements		

BIOL 1610 & BIOL 1615	Principles of Biology I and Principles of Biology I Lab	5
BIOL 1620 & BIOL 1625	Principles of Biology II and Principles of Biology II Lab	5
BIOL 3010	Evolution	3
BIOL 3030	Principles of Genetics	4
BIOL 3040 & BIOL 3045	General Ecology and General Ecology Lab	4
BIOL 3150 & BIOL 3155	Biostatistics and the Scientific Method and Biostatistics and the Scientific Method Lab	3
Complete one of the following sets of courses:		
BIOL 3450 & BIOL 3455	General Microbiology and General Microbiology Lab	4
BIOL 3550 & BIOL 3555	Eukaryotic Cell Biology and Eukaryotic Cell Biology Lab	4
Complete one of the following:		
BIOL 4910	Senior Seminar I	1
BIOL 4920	Senior Seminar II	1
Biology Electives		
Complete one of the following sets of courses:		
BIOL 4500 & BIOL 4505	Comparative Vertebrate Physiology and Comparative Vertebrate Physiology Lab	4
BIOL 4600 & BIOL 4605	Plant Physiology and Plant Physiology Lab	4
Complete one of the following courses or sets of courses:		
BIOL 3200 & BIOL 3205	Invertebrate Zoology and Invertebrate Zoology Lab	4
BIOL 4200 & BIOL 4205	Plant Taxonomy and Plant Taxonomy Lab	4
BIOL 4230 & BIOL 4235	and General Parasitology Lab	4
BIOL 4260 & BIOL 4265	Herpetology and Herpetology Lab	3
BIOL 4270 & BIOL 4275	Ichthyology and Ichthyology Lab	3
BIOL 4280	Marine Biology	3
BIOL 4380 & BIOL 4385	Ornithology and Ornithology Lab	3
BIOL 4411 & BIOL 4415	Mammalogy and Mammalogy Lab	4
BIOL 4440 & BIOL 4445	General Entomology and General Entomology Lab	4
Complete 14-15 credits from the following or from any upper-division BIOL course listed above not already used to fulfill a requirement:		
BIOL 3000R	Rural Health Scholars (2 cr. max.)	1
BIOL 3100	Bioethics	3
BIOL 3110	Scientific Writing	2
BIOL 3140 & BIOL 3145	Comparative Vertebrate Anatomy and Comparative Vertebrate Anatomy Lab	4
BIOL 3230R	Cadaver Practicum	2
BIOL 3250	Cancer Biology	2
BIOL 3340 & BIOL 3345	Plant Anatomy and Plant Anatomy Lab	4
BIOL 3360	Developmental Biology	3
BIOL 3460	Biology of Infectious Disease	3
BIOL 3470		3

BIOL 4190 & BIOL 4195	Mammalian Histology and Mammalian Histology Lab	4
BIOL 4240 & BIOL 4245	Virology and Virology Lab	4
BIOL 4300 & BIOL 4305	Molecular Biology and Molecular Biology Laboratory	4
BIOL 4350 & BIOL 4355	Animal Behavior and Animal Behavior Lab	4
BIOL 4400	Pathophysiology	3
BIOL 4460 & BIOL 4465	Plant Ecology and Plant Ecology Lab	3
BIOL 4810R	Independent Research I	1-4
BIOL 4820R	Independent Research II	1-4
BIOL 4830R	Independent Research III	1-4
BIOL 4930R	Senior Thesis	1-4

Note:

A course may only be used to fulfill one program requirement.

Advising Note:

Pre-health professionals should complete CHEM 3510 Biochemistry I and a diversity course.

Graduation Requirements

1. Complete a minimum of 120 college-level credits (1000 and above).
2. Complete at least 40 upper-division credits (3000 and above).
3. Complete at least 30 upper-division credits at DSU for institutional residency.
4. Cumulative GPA 2.0 or higher.
5. Grade C or higher required (not C-) in each Program Requirement, Core Discipline Requirement, and Biology Elective Requirement course.
6. Maximum 6 total credits of BIOL 4810R, BIOL 4820R, BIOL 4830R, and/or BIOL 4930R may be used toward Biology requirements.

Graduation Plan

Course	Title	Hours
1st Year		
Fall Semester		
BIOL 1001	FYE: Biological Sciences	1
BIOL 1610	Principles of Biology I meets General Education (Life Sciences) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)	4
BIOL 1615	Principles of Biology I Lab meets General Education (Lab Science) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)	1
CHEM 1210	Principles of Chemistry I meets General Education (Physical Sciences) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)	4
CHEM 1215	Principles of Chemistry I Lab	1
ENGL 1010	Introduction to Writing	3
LIB 1010	Information Literacy	1
	Hours	15
Spring Semester		
BIOL 1620	Principles of Biology II	4
BIOL 1625	Principles of Biology II Lab	1
CHEM 1220	Principles of Chemistry II	4
CHEM 1225	Principles of Chemistry II Lab	1
MATH 1210	Calculus I meets General Education (Mathematics) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)	4
	Hours	14

2nd Year		
Fall Semester		
BIOL 3030	Principles of Genetics	4
CHEM 2310	Organic Chemistry I	4
CHEM 2315	Organic Chemistry I Lab	1
CIS 1200	Computer Literacy	3
PHYS (Required Physics I course/ Lab) meets General Education (Exploration)		5
	Hours	17
Spring Semester		
BIOL 3010	Evolution	3
BIOL 3040	General Ecology	3
BIOL 3045	General Ecology Lab	1
CHEM 2320	Organic Chemistry II	4
CHEM 2325	Organic Chemistry II Lab	1
General Education (Social & Behavioral Sciences /GLOCUP) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
	Hours	15
3rd Year		
Fall Semester		
BIOL 3150	Biostatistics and the Scientific Method	2
BIOL 3155	Biostatistics and the Scientific Method Lab	1
BIOL Requirement (Approved Micro course/ Lab)		4
BIOL Elective (Upper-division Biology elective)		4
General Education (American Institutions) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
General Elective		1
	Hours	15
Spring Semester		
ENGL 2010	Interm Writing Selected Topics:	3
BIOL Requirement (Physiology course/ Lab)		4
PHYS (Required Physics II course/ Lab)		5
General Elective		3
	Hours	15
4th Year		
Fall Semester		
BIOL 4910 or BIOL 4920	Senior Seminar I or Senior Seminar II	1
BIOL Requirement (Organismal course)		3-4
BIOL Elective (Upper-division Biology elective)		4
General Elective (Fine Arts) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
General Elective		3
	Hours	14-15
Spring Semester		
BIOL 4910 or BIOL 4920	Senior Seminar I or Senior Seminar II	1
BIOL Elective (Upper-division Biology elective)		4
BIOL Elective (Upper-division Biology elective)		3
General Education (Literature/Humanities / GLOCUP) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
General Elective(s)		4
	Hours	15
	Total Hours	120-121