

Bachelor of Science in Biology with Integrated Science - Biology Education Emphasis

Program Curriculum

129 credits

DSU General Education Requirements

All DSU General Education 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
General Education Core Requirements (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		
English		3-7
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

Code	Title	Hours
Complete one of the following American Institutions GE course (Secondary Education requirement):		
HIST 1700 or POLS 1100	American Civilization (AI, GC) American Government (AI)	3
Complete one of the following Social & Behavioral Sciences GE courses (Secondary Education requirement):		
FSHD 1500 or PSY 1010 or PSY 1100	Human Development Lifespan (SS, GC) General Psychology (SS, GC) Human Development Through Lifespan (SS) (GC)	3

Code	Title	Hours
Biology Program Requirements		
CHEM 1210 & CHEM 1215	Principles of Chemistry I (PS) and Principles of Chemistry I Lab (LAB)	5
CHEM 1220 & CHEM 1225	Principles of Chemistry II and Principles of Chemistry II Lab	5
PHYS 2010 & PHYS 2015	College Physics I and College Physics I Lab	5
MATH 1050 & MATH 1060 or MATH 1080	College Algebra / Pre-Calculus and Trigonometry Pre-Calculus with Trigonometry	5-7
Discipline Core Requirements		
BIOL 1610 & BIOL 1615	Principles of Biology I (LS) and Principles of Biology I Lab (LAB)	5
BIOL 1620 & BIOL 1625	Principles of Biology II and Principles of Biology II Lab	5
BIOL 2320 & BIOL 2325 or BIOL 3140 & BIOL 3145	Human Anatomy and Human Anatomy Lab Comparative Vertebrate Anatomy and Comparative Vertebrate Anatomy Lab	4-5

BIOL 2420 & BIOL 2425 or BIOL 4500 & BIOL 4505	Human Physiology and Human Physiology Lab Comparative Vertebrate Physiology and Comparative Vertebrate Physiology Lab	4
BIOL 3010	Evolution	3
BIOL 3030	Principles of Genetics	4
BIOL 3040	General Ecology	3
BIOL 3045	General Ecology Lab	1

Complete one of the following sets of courses:

BIOL 2060 & BIOL 2065 or BIOL 3450 & BIOL 3455 or BIOL 3550 & BIOL 3555	Principles of Microbiology and Principles of Microbiology Lab General Microbiology and General Microbiology Lab Eukaryotic Cell Biology and Eukaryotic Cell Biology Lab	
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Required Biology Elective

BIOL 2400 & BIOL 2405	Plant Kingdom (LS) and Plant Kingdom Lab (LAB)	4
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Complete one of the following sets of Zoology courses:

BIOL 3200 & BIOL 3205	Invertebrate Zoology and Invertebrate Zoology Lab	
BIOL 4260 & BIOL 4265	Herpetology and Herpetology Lab	
BIOL 4270 & BIOL 4275	Ichthyology and Ichthyology Lab	
BIOL 4350 & BIOL 4355	Animal Behavior and Animal Behavior Lab	
BIOL 4380 & BIOL 4385	Ornithology and Ornithology Lab	
BIOL 4411 & BIOL 4415	Mammalogy and Mammalogy Lab	
BIOL 4440 & BIOL 4445	General Entomology and General Entomology Lab	

Integrated Science Requirements

GEO 1110 & GEO 1115	Physical Geology and Physical Geology Lab	4
GEOG 1020 & GEO 1025	Introduction to Weather and Life of the Past Laboratory (LAB)	4
PHYS 1040 & PHYS 1045	Elementary Astronomy and Elementary Astronomy Lab	4

Lab Safety Requirement

SCI 2600	Lab Safety for Teachers	1
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Secondary Education Program Prerequisite Courses

EDUC 1010	Foundations/Intro to Education	3
EDUC 2010	Intro to Exceptional Learners	3
EDUC 2400	Foundations Multicultural/ESL (GC)	3
EDUC 2500	Instructional Technology in K-12 Classrooms	3
EDUC 3110	Educational Psychology	3

Secondary Education Program Admission

To be admitted to the Secondary Education Program and enroll in professional courses:

- USBE R277-504-3 A(3) "requires candidates to maintain a cumulative university GPA of 3.0, and receive a C or better in all education related courses and major required content courses"

and students must pass the appropriate PRAXIS II content area subject test(s). In addition, one of the following must be completed:

- Students with BA/BS degrees in progress must have completed at least 95% of major coursework and have approval of major academic content area department advisor
- Students with completed BA/BS or higher degrees must have their transcripts reviewed by content area department advisor

Secondary Education Program Professional Requirements

Code	Title	Hours
Semester I		
SCI 4700	Secondary Science Teaching Methods	3
SCED 3720	Reading Writing Content Areas	3
SCED 4100	Curriculum, Instruction, and Assessment	3
SCED 4600	Classroom Management	3
Semester II		
SCED 4900	Secondary Student Teaching	10
SCED 4989	Student Teaching Seminar	2

Graduation Requirements

1. Complete a minimum of 129 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 university GPA 3.0 or higher.
5. Grade C or higher (not C-) in each Biology Program Requirement, Core Discipline Requirement, and Biology Elective course.
6. USBE R277-504-3 A(3) "requires candidates to maintain a cumulative university GPA of 3.0, and receive a C or better in all education related courses and major required content courses"
7. 3.0 GPA in program prerequisite and professional courses.

Graduation Plan

Course	Title	Hours
1st Year		
Fall Semester		
BIOL 1610 & BIOL 1615	Principles of Biology I (LS) and Principles of Biology I Lab (LAB) (meets General Education (Life Sciences) (catalog.dixie.edu/programs/generaleducation/#gerequisitestext))	5
CHEM 1210 & CHEM 1215	Principles of Chemistry I (PS) and Principles of Chemistry I Lab (LAB) (meets General Education (Physical Sciences) (catalog.dixie.edu/programs/generaleducation/#gerequisitestext))	5
EDUC 1010	Foundations/Intro to Education	3
SSC 1010	Trailblazer Connections	2
General Education (Fine Arts) (catalog.dixie.edu/programs/generaleducation/#gerequisitestext)		3
	Hours	18
Spring Semester		
BIOL 1620 & BIOL 1625	Principles of Biology II and Principles of Biology II Lab	5
BIOL 2320 & BIOL 2325	Human Anatomy and Human Anatomy Lab	5
CHEM 1220 & CHEM 1225	Principles of Chemistry II and Principles of Chemistry II Lab	5
ENGL 1010	Introduction to Writing (EN)	3
	Hours	18
2nd Year		
Fall Semester		
BIOL 3010	Evolution	3
BIOL 3030	Principles of Genetics	4

ENGL 2010	Intermediate Writing Selected Topics: (EN)	3
MATH 1080	Pre-Calculus with Trigonometry	5
General Education (American Institutions) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext) ¹		3
Hours		18
Spring Semester		
BIOL 2420 & BIOL 2425	Human Physiology and Human Physiology Lab	4
BIOL 3040 & BIOL 3045	General Ecology and General Ecology Lab	4
EDUC 2400	Foundations Multicultural/ESL (GC)	3
GEOG 1020 & GEOG 1025	Introduction to Weather and Introduction to Weather Lab	4
BIOL Requirement (Approved Zoology course)		3
Hours		18
3rd Year		
Fall Semester		
EDUC 2010	Intro to Exceptional Learners	3
GEO 1110 & GEO 1115	Physical Geology and Physical Geology Lab	4
BIOL 2400 & BIOL 2405	Plant Kingdom (LS) and Plant Kingdom Lab (LAB)	4
PHYS 1040 & PHYS 1045	Elementary Astronomy and Elementary Astronomy Lab	4
BIOL Requirement (Approved Micro course)		4
Hours		19
Spring Semester		
BIOL 2420 & BIOL 2425	Human Physiology and Human Physiology Lab	4
EDUC 2500	Instructional Technology in K-12 Classrooms	3
EDUC 3110	Educational Psychology	3
PHYS 2010 & PHYS 2015	College Physics I and College Physics I Lab	5
General Education (Literature/Humanities) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
Hours		18
4th Year		
Fall Semester		
SCED 3720	Reading Writing Content Areas	3
SCED 4100	Curriculum, Instruction, and Assessment	3
SCED 4600	Classroom Management	3
SCI 2600	Lab Safety for Teachers	1
SCI 4700	Secondary Science Teaching Methods	3
Hours		13
Spring Semester		
SCED 4900	Secondary Student Teaching	10
SCED 4989	Student Teaching Seminar	2
Hours		12
Total Hours		134

¹ Specific courses fulfill SET requirements