

# Bachelor of Science in Biology - Biology Education Emphasis

## Program Curriculum

120 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
<b>General Education Core Requirements</b> ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> )		
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

### Secondary Education Pre-Program Requirements

Code	Title	Hours
HIST 1700 or POLS 1100	American Civilization (AI, GC) American Government (AI)	3
FSDH 1500 or PSY 1010 or PSY 1100	Human Development Lifespan (SS, GC) General Psychology (SS, GC) Human Development Through Lifespan (SS) (GC)	3
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

### Biology Core Requirements

Code	Title	Hours
<b>Biology Program Requirements</b>		
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
MATH 1050	College Algebra / Pre-Calculus	4
<b>Core Discipline Requirements</b>		
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	Human Anatomy and Human Anatomy Lab	4-5

or BIOL 3140 & BIOL 3145	Comparative Vertebrate Anatomy and Comparative Vertebrate Anatomy Lab	
BIOL 2420 & BIOL 2425	Human Physiology and Human Physiology Lab	4
or BIOL 4500 & BIOL 4505	Comparative Vertebrate Physiology and Comparative Vertebrate Physiology Lab	
BIOL 3010	Evolution	3
BIOL 3030	Principles of Genetics	4
BIOL 3040 & BIOL 3045	General Ecology and General Ecology Lab	4
Complete one of the following sets of courses:		4
BIOL 2060 & BIOL 2065	Principles of Microbiology and Principles of Microbiology Lab	
BIOL 3450 & BIOL 3455	General Microbiology and General Microbiology Lab	
BIOL 3550 & BIOL 3555	Eukaryotic Cell Biology and Eukaryotic Cell Biology Lab	
<b>Required Biology Elective</b>		
BIOL 2400 & BIOL 2405	Plant Kingdom (LS) and Plant Kingdom Lab (LAB)	4
Complete one of the following sets of Zoology courses:		4
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	
<b>Lab Safety Certification Requirement</b>		
SCI 2600	Lab Safety for Teachers	1

## 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
<b>Semester I</b>		
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 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 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
<b>1st Year</b>		
<b>Fall Semester</b>		
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
ENGL 1010	Introduction to Writing (EN)	3
SSC 1010	Trailblazer Connections	2
Hours		15
<b>Spring Semester</b>		
BIOL 1620 & BIOL 1625	Principles of Biology II and Principles of Biology II Lab	5
CHEM 1220 & CHEM 1225	Principles of Chemistry II and Principles of Chemistry II Lab	5
MATH 1050	College Algebra / Pre-Calculus ( meets General Education (Mathematics) (catalog.dixie.edu/programs/generaleducation/#gerequisitestext))	4
ENGL 2010	Intermediate Writing Selected Topics: (EN)	3
Hours		17
<b>2nd Year</b>		
<b>Fall Semester</b>		
BIOL 2320 & BIOL 2325	Human Anatomy and Human Anatomy Lab	5
BIOL 3010	Evolution	3
BIOL 3030	Principles of Genetics	4
EDUC 1010	Foundations/Intro to Education	3
Hours		15
<b>Spring Semester</b>		
BIOL 3040 & BIOL 3045	General Ecology and General Ecology Lab	4
EDUC 2010	Intro to Exceptional Learners	3
General Education (Fine Arts) (catalog.dixie.edu/programs/generaleducation/#gerequisitestext)		3
General Education (Social & Behavioral Sciences) (catalog.dixie.edu/programs/generaleducation/#gerequisitestext) <sup>1</sup>		3
General Education (American Institutions) (catalog.dixie.edu/programs/generaleducation/#gerequisitestext) <sup>1</sup>		3
Hours		16

**3rd Year****Fall Semester**

BIOL 2420 & BIOL 2425	Human Physiology and Human Physiology Lab	4
EDUC 2400	Foundations Multicultural/ESL (GC)	3
BIOL Requirement (Approved Micro Course)		4
General Education (Literatures/Humanities) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
Hours		14

**Spring Semester**

CHEM 2310 & CHEM 2315	Organic Chemistry I and Organic Chemistry I Lab	5
EDUC 2500	Instructional Technology in K-12 Classrooms	3
EDUC 3110	Educational Psychology	3
BIOL Requirement (Approved Zoology course)		4
SCI 2600	Lab Safety for Teachers	1
Hours		16

**4th Year****Fall Semester**

SCED 3720	Reading Writing Content Areas	3
SCED 4100	Curriculum, Instruction, and Assessment	3
SCED 4600	Classroom Management	3
SCI 4700	Secondary Science Teaching Methods	3
General Education (Exploration) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
Hours		15

**Spring Semester**

SCED 4900	Secondary Student Teaching	10
SCED 4989	Student Teaching Seminar	2
Hours		12
Total Hours		120

<sup>1</sup> Specific courses fulfill SET requirements