

# BIOLOGY, B.A.

Biology in the broadest sense is the study of life. It is a diverse subject and understanding it requires a background in all the sciences. Students synthesize that knowledge to understand the living world, a world that is both remarkably unified and wonderfully diverse. Our graduates are well prepared for admission to various health professional schools such as medical school, PA school, or pharmacy school, as well as graduate school in the biological sciences, or work in life science industries or organizations.

## Contact Information

biology@css.edu

Upon completion of the Biology degree, the student will:

1. Apply foundational scientific concepts to interpret biological phenomena (Critical Thinking).
2. Effectively communicate biological concepts and interpretations (Oral and Written Communication).
3. Use quantitative analysis to interpret biological data (Quantitative Analysis).

## Requirements

Students must achieve the following program requirements for all courses listed under "Program Required Courses" for the Biology major.

### Program Requirements

**Major Credits: 66**

**Major Residency Credits: 16**

**Minimum GPA: 2.0**

**Minimum Grade: C**

### Program Required Courses

All biology majors are required to complete the following core curriculum:

Code	Title	Credits
<b>Core Courses</b>		
BIO 1115	Global Problems, Scientific Solutions	4
BIO 1116	Novel Antimicrobial Discovery	2
BIO 1125	Foundations in Biology	4
BIO 3500	Genetics	4
BIO 4000	Outcomes Assessment	0
<b>Required Supporting Science Coursework</b>		
CHM 1110	General Chemistry I	4
CHM 1120	General Chemistry II	4
CHM 2200	Organic Chemistry I	4
CHM 2210	Organic Chemistry II	4
CHM 3240	Biochemistry I	4
PSC 2001	Physics I <sup>1</sup>	4
PSC 2002	Physics II	4
MTH 2221	Calculus I	4
	or PSY 3331 Statistics	
	or MTH 2442 Introduction to Data Analysis and Applied Statistics	
<b>Biology Electives</b>		<b>20</b>

Choose 20 credits with at least 4 credits from each of the following categories:

#### Human, Cellular and Molecular Biology

BIO 2010	Bacteriophage Discovery
BIO 2015	Bacteriophage Genomics
BIO 2020	Microbiology
BIO 2021	Microbiology Lab
BIO 2510	Human Anatomy and Physiology I
BIO 2520	Human Anatomy and Physiology II
BIO 3300	Virology
BIO 3600	Cell Biology (Immunology)
BIO 3777	Topics (Immunology)
BIO 3777	Topics (Advanced Phage Biology)
BIO 4125	Biology of Aging
BIO 4160	Molecular Biology

#### Animal Diversity

BIO 3100	Life's History
BIO 3110	Invertebrate Zoology
BIO 3120	Vertebrate Zoology
BIO 3777	Topics (Super Physiology)

#### Ecology and Field Studies

BIO 3210	Field Biology
BIO 3220	Plant Systematics
BIO 4170	Ecology <sup>2</sup>
BIO 4180	Animal Behavior

**Total Credits** **66**

- The student must consult catalogs of desired graduate or professional schools for any special requirements.

<sup>1</sup> Requires MTH 1111 or Math ACT of 24.

<sup>2</sup> Transfer students who have completed the equivalent of BIO 4170 elsewhere may be required to take a course with a research component.

## Degree Requirements

To graduate from The College of St. Scholastica, baccalaureate students must meet the following minimum degree requirements.

**Total Credits: 128**

**Upper Division Credits: 42**

**Residency Requirement: 32**

**Minimum GPA: 2.0**