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

Learning Outcomes

Upon completion of the Biology degree, the student will:

1. Demonstrate proficiency in biological concepts of evolution, information flow, structure, function, transformation of energy and matter, and systems.
2. Demonstrate skills in quantitative reasoning and modeling.
3. Demonstrate an understanding of the process of science through proficiency in scientific thinking, information literacy, question formulation study design, data interpretation and evaluation, and doing research.
4. Be able to communicate and collaborate scientifically with consideration for societal context.
5. Demonstrate an understanding of the interdisciplinary nature of science.

Requirements

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

Program Requirements

Major Credits: 66
Major Residency Credits: 16
Minimum GPA: 2.0 (for Biology coursework)
Minimum Grade: C

Program Required Courses

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

Code	Title	Credits
Core Courses		
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
Required Supporting Science Coursework		
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 [1]	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	
Biology Electives [2]		**20**

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	
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 3450	Super Physiology	
Ecology and Field Studies		
BIO 3210	Field Biology	
BIO 3220	Plant Systematics	
BIO 4170	Ecology	
BIO 4180	Animal Behavior	
Total Credits		**66**

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

[1] Requires MTH 1111 or Math ACT of 24.
[2] The following courses can not be used to fulfill biology electives: BIO 1036, BIO 1102, BIO 1103, BIO 1104, BIO 2002, BIO 2205, BIO 3005.

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