

**BACHELOR OF SCIENCE BIOLOGY****GSC 100 The First Year Experience 0 hour**

All degree seeking students are required to take GSC 100 during their first semester.

**General Education Requirements 39 hours**

Students are required to take BIOL 120, BIOL 121 and MATH 115 as part of their General Education requirements to enhance their success in the program.

**Biology Major 63 hours**

BIOL 120	Principles of Biology I	
BIOL 121	Principles of Biology II	
BIOL 193	Scientific Biology	1
BIOL 293	Experimental Design	1
BIOL 456	Genetics	4
BIOL 493	Senior Seminar	1
BIOL 499	Individual Research Problems	3
CHEM 101	General Chemistry I	4
CHEM 102	General Chemistry II	4
CHEM 301	Organic Chemistry I	4
MATH 115	College Algebra	
MATH 256	Probability and Statistics I	3
PHYS 201	General Physics I	4
PHYS 202	General Physics II	4

**Required Courses 15-16 hours**

A minimum of one course from each of the following categories. May take additional courses if they are not part of a minor or another major.

**Organismal Biology (select at least one) 4**

BIOL 210	Zoology	
BIOL 305	General Botany	
BIOL 351	Flora of West Virginia	
BIOL 361	Microbiology	

**Ecology/Evolution (select at least one) 4**

BIOL 371	Evolution	
BIOL 400	Ecology and Field Biology	

**Cellular/Physiology (select at least one) 4**

BIOL 335	Cell Physiology	
BIOL 420	Neurobiology	
BIOL 435	Developmental Biology	
BIOL 460	Physiological Ecology	
CHEM 380	Biochemistry I*	

**Applied Biology (select at least one) 3-4**

BIOL 309	Human Anatomy and Physiology I	
BIOL 425	Bioethics	
BIOL 470	Conservation Biology	
NRMT 201	Forest Ecology	

## 242 Department of Science and Mathematics

### Major Electives

14-15 hours

Recommended electives

BIOL 310	Human Anatomy and Physiology II
CHEM 302	Organic II*
CHEM 381	Biochemistry II*
NRMT 234	GIS Application I
NRMT 334	GIS Application II

\*These courses can be applied to the major if they are not part of a minor or another major.

### Minor

18 hours

Total minimum hours required for degree

120 hours

## GATEWAY ASSESSMENT - BIOL 293 - CAPSTONE ASSESSMENT - BIOL 493

### For careers in Ecology and Conservation

#### Recommended courses

BIOL 210	Zoology
BIOL 305	Botany
BIOL 356	Flora of West Virginia
BIOL 470	Conservation Biology
BIOL 371	Evolution
BIOL 400	Ecology and Field Biology
BIOL 460	Physiological Ecology
NRMT 201	Forest Ecology
NRMT 234	GIS Applications I
NRMT 334	GIS Applications II

### Pre-Professional (Pre-Med, Pre-Dental, Pre-Physician Assistant, Pre-Veterinarian)

#### Recommended courses

BIOL 210	Zoology
BIOL 309	Anatomy and Physiology I
BIOL 335	Cell Physiology
BIOL 361	Microbiology
BIOL 371	Evolution
BIOL 420	Neurobiology
BIOL 425	Bioethics
BIOL 435	Developmental Biology
CHEM 302	Organic Chemistry II
CHEM 380	Biochemistry I
CHEM 381	Biochemistry II

**Other Biology Careers – talk to your advisor about the best courses for you.**