

BIOLOGY MAJOR, BACHELOR OF SCIENCE (B.S.)

Freshman Year		Credit Hours
BIOL 120	Principles Of Biology I	3
BIOL 120	Principles Of Biology I (LAB)	1
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
MATH 120	College Algebra	3
ENGL 110	Composition I	3
BIOL 130	Professional Practices Biology	2
BIOL 121	Principles Of Biology II	4
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
MATH 121	Trigonometry	3
ENGL 111	Composition II	3
GE Wellness/Health Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#gewellnesshealthtext)		1
Credit Hours		31
Sophomore Year		Credit Hours
BIOL 205	Integrative Organismal Biology	3
BIOL 205	Integrative Organismal Biology (LAB)	1
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
PSYC 101	Introduction to Psychology	3
GE Literature Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#geliteratureelectivestext)		3
GE Wellness/Health Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#gewellnesshealthtext)		1
BIOL 201	Cell And Molecular Biology	4
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
GE Global Studies Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#geglobalstudiestext)		3
GE Humanities Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#geselectivestext)		3
GE History Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#gehistoryelectivestext)		3
Credit Hours		32
Junior Year		Credit Hours
BIOL 241	Introduction To Microbiology	4
BIOL 324	Ecology	3
BIOL 324	Ecology (LAB)	1
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
STAT 210	Elementary Statistics I	3
BIOL 320	Principles Of Genetics	4
Restricted Elective	BIOL Course and Lab	4
PHYS 106	Introduction to Physics II	3
PHYS 106	Introduction to Physics II (LAB)	1
Unrestricted Elective		3
Credit Hours		30
Senior Year		Credit Hours
Restricted Elective	BIOL Course and Lab	4
Restricted Elective	BIOL Course and Lab	4
Restricted Elective	BIOL Course	3
BIOL 446	Investigations and Research	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3

BIOL 447	Seminar In Biology	1
Credit Hours		27
Total Credit Hours		120

¹ Additional BIOL course at 300 or 400-level lab may be required depending upon chosen elective. See catalog for course requirements.

GPA Requirements

All Biology majors must pass BIOL 120, BIOL 121, BIOL 201, BIOL 205, BIOL 241, BIOL 320, and BIOL 324 (the **BIOLOGY CORE COURSES**) with a grade of C or better in order to graduate. All Biology majors must pass BIOL 120, BIOL 121, and BIOL 205 with a grade of C or better in order to advance beyond the **BIOLOGY CORE COURSES**. All Biology majors must have at least a 2.0 overall GPA and a 2.5 Science and Math GPA (Biology, Chemistry, Math (including statistics), and Physics) in order to graduate.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#geenglishselectivestext)		
GE Global Studies Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#geglobalstudiestext)		
GE History Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#gehistoryelectivestext)		
GE Humanities Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#geselectivestext)		
GE Literature Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#geliteratureelectivestext)		
GE Science Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#gescienceelectivestext)		
GE Social Science Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#gesocialscienceelectivestext)		
GE Wellness/Health Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#gewellnesshealthtext)		
GE Mathematics Electives (http://catalog.vsu.edu/undergraduate/general-education-programs/#gemathematicselectivestext)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
BIOL 130	Professional Practices Biology	2
BIOL 121	Principles Of Biology II	4
BIOL 201	Cell And Molecular Biology	4
BIOL 205	Integrative Organismal Biology	3
BIOL 205 Lab		1
BIOL 241	Introduction To Microbiology	4
BIOL 320	Principles Of Genetics	3
BIOL 320 Lab		1

BIOL 324	Ecology	3
BIOL 324 Lab		1
BIOL 446	Investigations and Research	3
BIOL 447	Seminar In Biology	1
Total Credit Hours		30
Code	Title	Credit Hours
STAT 210	Elementary Statistics I	3
PHYS 105	Introduction to Physics I	3
PHYS 105 Lab		1
PHYS 106	Introduction to Physics II	3
PHYS 106 Lab		1
CHEM 151	General Chemistry I	3
CHEM 151 Recitation		0
CHEM 153	General Chemistry I Laboratory	1
CHEM 152	General Chemistry II	3
CHEM 152 Recitation		0
CHEM 154	General Chemistry II Laborator	1
CHEM 305	Organic Chemistry I	3
CHEM 307	Organic Chemistry Lab I	1
CHEM 306	Organic Chemistry II	3
CHEM 308	Organic Chemistry Lab II	1
Total Credit Hours		27

Unrestricted Electives

Code	Title	Credit Hours
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Students may choose any course in the catalog that they have pre-requisites necessary for enrollment and that does not satisfy another requirement in the major. 15

Restricted Electives

Students may choose any Biology Course at the 300-level and 400-level that does not satisfy another requirement.

At least three courses with labs (4 credit hours each) are required. The final three credits do not require a lab, unless the course lists the lab as a co-requisite.

Code	Title	Credit Hours
BIOL 310	Plant Morphology	3
BIOL 310 Lab		1
BIOL 311 & 311	Comparative Veterbrate Anatomy and Comparative Veterbrate Anatomy (Lab)	4
BIOL 311 Lab		1
BIOL 313	General Zoology	3
BIOL 313 Lab		1
BIOL 316	Human Physiology	3
BIOL 333	Biological Illustration	3
BIOL 352	Intro to Mathematical Biology	3
BIOL 360	Genomics	4
BIOL 401	Intro to Computational Biology	3
BIOL 402	Student Teaching In Biology	3

BIOL 405	Animal Behavior	3
BIOL 405 Lab		1
BIOL 410	Systematic Botany	4
BIOL 412	Invertebrate Zoology	4
BIOL 413	Vertebrate Biology	4
BIOL 414	Techn Of Molecular Biology	3
BIOL 414 Lab		1
BIOL 415	Vertebrate Histology	3
BIOL 415 Lab		1
BIOL 416	Quantitative Biology	4
BIOL 417	General Physiology	3
BIOL 417 Lab		1
BIOL 418	Plant Physiology	4
BIOL 419	Cell Physiology	4
BIOL 422	Evolutionary Biology	4
BIOL 423	Conservation Biology Lab	3
BIOL 425	Embryology	3
BIOL 425 Lab		1
BIOL 428	Teaching Sci In Secdary Sch	3
BIOL 440	Virology	3
BIOL 440 Lab		1
BIOL 443	Immunology & Serology	4
BIOL 445	Pathogenic & Diagn Microbio	4
BIOL 450	Intro To Bioinformatics	3
BIOL 454	Programming for Bioinformatics	3
BIOL 489	Independent Study in Biology	1-4
BIOL 490	Topics in Biology	3

Summary, Biology Curriculum

Code	Title	Credit Hours
General Education		33
Core Requirements		30
Major/Concentration Requirements		27
Electives		30
Restricted Electives ¹⁵		
Unrestricted Electives ¹⁵		
Total Credit Hours		120