

# BIOLOGY MAJOR, BS

Campus: NYC, Westchester

## Major Completion Summary

Requirement	Credits
University Core Requirements	44-55
Major Requirements	42-47
Open Electives	17-31
<b>Total Credits</b>	<b>128</b>

## University Core Requirements (44-55 Credits)

See complete University Core (<http://catalog.pace.edu/undergraduate/university-core-curriculum/>) requirements.

Note: Various major-required math and science courses listed below may fulfill foundation, area of knowledge, and/or core requirements. Please consult with an academic advisor.

## Major Requirements (42-47 Credits)

Code	Title	Credits
<b>Biology Core Courses</b>		
BIO 101	General Biology I	4
BIO 102	General Biology II	4
BIO 210	Ecology	4
BIO 231	Genetics	4
BIO 327	Cellular Biochemistry	4
BIO 335	Molecular and Cellular Biology	4
BIO 335A	Molecular and Cellular Biology (NYC students only)	1
BIO 490	Introduction to Research in the Biological Sciences	3
BIO 493	Major Field Test in Biology	0
Select one of the following:		3
BIO 395	Independent Study in Biology	
BIO 480	Research in Biology	
BIO 491	Internship in Biology	
<b>Biology Electives</b>		
Select one course from each of the following category groups:		9-12
<i>Molecular and Cellular Biology Category</i>		
BIO 222	Plants and People	
BIO 264	Microbiology	
BIO 306	Advanced Microbiology	
BIO 325	Neurobiology	
BIO 346	Introduction to Basic Pharmacology	
BIO 375	Advanced Cell Biology	
BIO 399C	Topic: Cancer Cell Biology	
BIO 399I	Fundamentals in Reproductive Biology	
<i>Organismal Biology Category</i>		
BIO 221	Botany	
BIO 222	Plants and People	
BIO 233	Fundamentals of Histology and Histopathology	
BIO 236	Comparative Vertebrate Anatomy	
BIO 251	Principles of Human Anatomy	
BIO 264	Microbiology	
BIO 296D	Topic: Medicinal Botany: Plants that Heal	

BIO 334	General Physiology
BIO 343	General Endocrinology
BIO 359	Immunology
BIO 399I	Fundamentals in Reproductive Biology

*Biological Systems and Ecology Category*

BIO 205	Concepts of Environmental Science
BIO 215	Urban Ecology
BIO 221	Botany
BIO 305	Evolutionary Biology
BIO 307	Microbial Ecology
BIO 322	Animal Behavior
BIO 345	Introduction to Toxicology

**Other Required Biology Electives**

Select two additional courses from the three preceding groups. At least one of the two courses must be lecture/laboratory course of 4 credits. 7-8

**Required Math and Science Courses**<sup>3, 4</sup>

CHE 111	General Chemistry I
CHE 112	General Chemistry II
CHE 223	Organic Chemistry I
CHE 224	Organic Chemistry II
MAT 131	Calculus I
MAT 141	Introductory Statistics for the Life Sciences

PHY Requirement Either Group A or Group B

## Group A

PHY 101	College Physics I
PHY 102	College Physics II

## Group B

PHY 111	General Physics I
PHY 112	General Physics II

**Total Credits** 47-51

<sup>2</sup> Students may fulfill some requirements within their core or open electives.

<sup>3</sup> Students should consult with faculty advisor on which physics sequence is most appropriate.

**Open Electives (17-31 Credits)**

Code	Title	Credits
<b>Open Electives</b>		
Select 17-31 credits <sup>1</sup>		17-31
<b>Total Credits</b>		<b>17-31</b>

<sup>1</sup> Open Elective credits must include required science and math courses not taken for University Core credit, UNV 101 First-Year Seminar: Introduction to University Community (required of incoming freshmen students), and remaining open electives.