

# ENVIRONMENTAL SCIENCE MAJOR, BS

**Campus:** NYC, Westchester

This major offers students an interdisciplinary environmental science program within the context of a liberal arts education. Designed for students interested in a scientific perspective on environmental issues, it provides both basic and applied knowledge needed to understand the environment and associated problems. This degree will allow students to continue with advanced studies in a graduate degree program or to enter the job market for environmental science positions.

## Major Completion Summary

Requirement	Credits
University Core Requirements	44-55
Major Requirements	44-47
Open Electives	22-40
<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.

Includes several of the major-required courses listed below:

Code	Title	Credits
<b>Foundation</b>		
MAT 131	Calculus I	4
<b>In Depth Sequence in Chemistry</b>		
CHE 111	General Chemistry I	4
CHE 112	General Chemistry II	4
CHE 213	Foundations of Organic Chemistry	4

Note: Any of these major-required courses not taken for University Core credit must be taken for Open Elective credit.

## Major Requirements (44-47 Credits)

Code	Title	Credits
<b>Major Requirements</b>		
BIO 101	General Biology I	4
BIO 102	General Biology II	4
MAT 141	Introductory Statistics for the Life Sciences <sup>1</sup>	4
PHY 101	College Physics I	4
<b>Environmental Science and Studies Requirements</b>		
ENV 100	Water, Wildlife and Windmills - An Introduction to Environmental Studies and Sciences	3
ENS 201	Fundamentals of Environmental Science I	4
ENS 202	Fundamentals of Environmental Science I	4
ENV 380	Introduction to Research Methods	3
<i>One of the following:</i>		3
ENS 486	Research in Environmental Science	
ENS 494	Internship in Environmental Science	
<i>One of the following:</i>		3
ENV 245	Environmental Justice	
ENV 265	Multiple Environmental Knowledges	
<b>Major Electives</b>		
Select 12-15 credits from the following three Elective Lists		12-15
<i>Elective List 1</i>		3
Select one of the following:		
ENV 225	Energy Policy	

ENS 326	Geographic Information Systems	
ENV 310	Environmental Policy and Sustainable Governance	
PHI 223	Environmental Ethics	
<i>Elective List 2</i>		3-4
Select one of the following:		
BIO 205	Concepts of Environmental Science	
BIO 210	Ecology	
BIO 264	Microbiology	
BIO 281	Botany	
BIO 307	Microbial Ecology	
BIO 322	Animal Behavior	
BIO 345	Introduction to Toxicology	
BIO 399Z	Topics: Evolutionary Biology	
CHE 221	Analytical Methods and Techniques	
CHE 310	Green Chemistry	
CHE 326	Biochemistry	
ENV 288	Flora and Fauna of the Hudson Valley	
ENV 344	Habitats of the Hudson Valley: Identification and Assessment	
MAT 222	Applied Multivariable Statistical Methods	
<i>Elective List 3</i>		6-8
Select two of the following, or from preceeding Elective Lists 1 and 2: <sup>1</sup>		
ENV 140	Act Locally: Sustainable Design and You	
ECO 310	Environmental Economics	
Any ENS/ENV 200-level, or higher.		

<sup>1</sup> May be taken within core.

## Open Electives (22-40 Credits)

Code	Title	Credits
<b>Open Electives</b>		
Select 22-40 credits <sup>1</sup>		24-27
<b>Total Credits</b>		<b>24-27</b>

<sup>1</sup> Range of credits reflects variations in a student's University Core requirements.

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ENG 110	Composition	3
BIO 101	General Biology I	4
ENV 100	Water, Wildlife and Windmills - An Introduction to Environmental Studies and Sciences	3
CHE 111	General Chemistry I	4
UNV 101	First-Year Seminar: Introduction to University Community	1
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
BIO 102	General Biology II	4
CHE 112	General Chemistry II	4
ENG 120	Critical Writing	4
Two Learning Community (LC) courses		6
<b>Credits</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
ENS 201	Fundamentals of Environmental Science I	4

CHE 223 or CHE 213	Organic Chemistry I or Foundations of Organic Chemistry	4-5
MAT 131	Calculus I	4
First Second Language Course. See Advisor for guidelines		
<b>Credits</b>		<b>12-13</b>
<b>Spring</b>		
COM 200	Public Speaking	3
ENS 202	Fundamentals of Environmental Science I	4
ENG 201	Writing in the Disciplines	3
CIS 101 or CIT 110 or CS 121	Introduction to Computing or Introduction to Information Technology or Computer Programming I	3
Second Language Course, if applicable		3
<b>Credits</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
PHY 101	College Physics I	4
ENV 245 or ENV 265	Environmental Justice or Multiple Environmental Knowledges	3
One elective course in subject ENV		3
One elective course in subject ENV		3
Take any one remaining Area of Knowledge course or Open Elective course		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
ENV 380	Introduction to Research Methods	3
MAT 141	Introductory Statistics for the Life Sciences	4
ENV 265 or ENV 245	Multiple Environmental Knowledges or Environmental Justice	3
One elective course in subject ENV		3
Take any one remaining Area of Knowledge course or Open Elective course		3
<b>Credits</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ENS 486 or ENV 498	Research in Environmental Science (Students can take this course in the spring term) or Mentoring Seminar	3
One elective course in subject ENV		3
Take any one remaining Area of Knowledge course or Open Elective course		3
Take any one remaining Area of Knowledge course or Open Elective course		3
Take any one remaining Area of Knowledge course or Open Elective course		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
ENS 486 or ENV 498	Research in Environmental Science (Students can take this course in the fall term) or Mentoring Seminar	3
One elective course in subject ENV (if needed)		3
Take any one remaining Area of Knowledge course or Open Elective course		3
Take any one remaining Area of Knowledge course or Open Elective course		3
Take any one remaining Area of Knowledge course or Open Elective course		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>123-124</b>