



College of Arts & Sciences Environmental & Plant Biology

The scheduling scenario below is intended to present an example pattern by which this major can be completed in three years. Those interested in pursuing this option need to work with an academic advisor to develop a specific plan to earn the 126 credit hours required for graduation.

The curriculum outlined below is a semester-by-semester plan of study for the BS in Plant Biology (BS2111), BA in Applied Plant Biology (BA2110) and BA in Field Ecology (BA2111) majors in adherence to section 3333.71 of the Revised Code for the three-year baccalaureate degrees.

The estimated number of hours transferred or taken as AP is set at 15. Please note these are just examples. The actual slate of courses would be dependent upon what courses a student actually has previous credit for. Students with additional AP credits would be allowed to count them (as appropriate) to the 3-year degree pathway. Additionally, students may earn credit through successful language placement tests that would apply toward the degree. A student should work closely with an advisor to design a plan that is specific to him/her and that courses are taken appropriately to complete the plan in the desired time frame.

The student should also be aware that trade-offs are inherent in the decision to complete a degree in three years. A student on the three-year track must stay focused on the curriculum and may not be able to explore educational alternatives or change programs or majors. S/he may also not be able to participate in study abroad programs, internships, student clubs or government, or service learning opportunities

BS 2111 Plant Biology

Post-Secondary Coursework or Transfer/AP/IB Credit

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Tier I Freshman Composition	3		
Tier II Cross Cultural Perspectives	3		
Tier II Humanities & Literature	3		
Tier I Quantitative Skills	3		
Tier II Social Science	3		
Total hours (minimum 15)	15		

Semester 1: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
MATH 2301 Calculus	4		

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
CHEM 1510 General Chemistry	4		C
PBIO 1140 Foundations of Plant Biology	4	YES	
PBIO 2090 Introduction to Ecology	3		
Tier II Fine Arts	3		
Total hours for semester	18		

Semester 2: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Arts & Sciences Humanities	3		
Arts & Sciences Social Science	3		
PBIO 1150 Plant Structure & Function	4		
CHEM 1520 General Chemistry II	4		
Arts & Sciences Humanities 2XXX	3		
Total hours for semester	17		

Semester 3: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Arts & Sciences Social Sciences	3		
Arts & Sciences Humanities	3		
Total hours for semester	6		

Semester 4: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PHYS 2051 Physics	5	YES	
Major Elective ¹	3	YES	
CHEM Specialty ²	3	YES	
Major Elective ¹	3	YES	
Foreign Language	4	YES	
Total hours for semester	18		

Semester 5: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 3300 Genetics	3	YES	
PBIO 3400 Plant Development	4	YES	
PBIO 3140 Statistics	4	YES	
Foreign Language	4		
Major Elective ¹	3		
Total hours for semester	18		

Semester 6: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 49XX UG Research or Internship	3	YES	
Total hours for semester	3		

Semester 7: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 4170 Ethics	1		
PBIO 4180J Writing	3		
Major Elective ¹	4		
General Elective	3		
General Elective	3		
Total hours for semester	16		

Semester 8: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 3250 or 3260 Physiology	3		
Major Elective ¹	3		
Major Elective ¹	3		
General Elective	3		
General Elective	3		
Total hours for semester	15		

¹ Major Electives- A minimum of 12 credit hours must be taken within PBIO at the 3000 or 4000 level, the 6 additional credit hours may come from PBIO or from the list provided: BIOS 3160, 3210, 3750, 3760, 4190, 4260, 4270, 4290, 4310, 4360, 4650, 4710, 4720, 4740; CHEM 2410, 3010, 3050, 3060, 3760, 4310, 4600, 4890, 4901, 4902; GEOL 2110, 2150, 2310, 2550; GEOG 2680, 3020 if not taken to satisfy another requirement.

²CHEM specialty course- choose from CHEM 3050 Organic Chem., CHEM 4091 Biochemistry or CHEM 2140 Analytical Chemistry.

BA 2110 Applied Plant Biology**Post-Secondary Coursework or Transfer/AP/IB Credit**

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Tier II Fine Arts	3		
Tier II Cross Cultural Perspectives	3		

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Tier II Humanities & Literature	3		
Tier I Quantitative Skills	3		
Tier II Social Science	3		
Total hours (minimum 15)	15		

Semester 1: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
MATH 1300	4		
CHEM 1210 General Chemistry	4		C
PBIO 1140 Foundations of Plant Biology	4	YES	
PBIO 2090 Introduction to Ecology	3		
ECON 103	3		
Total hours for semester	18		

Semester 2: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Arts & Sciences Humanities	3		
Freshman Composition	3		
PBIO 1150 Plant Structure & Function	4		
CHEM 1220 General Chemistry II	4		
Arts & Sciences Social Science	3		
Total hours for semester	17		

Semester 3: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Arts & Sciences Social Sciences	3		
Arts & Sciences Humanities	3		
Total hours for semester	6		

Semester 4: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Foreign Language	4		
Major Elective ¹	3	YES	
PBIO 2060 Sustainable Ag or PBIO 31060 Hort. Management	3	YES	
Arts & Sciences Social Science	3	YES	
Arts & Sciences Humanities 2XXX	4	YES	
Total hours for semester	16		

Semester 5: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 3300 Genetics	3	YES	
ECON/MKT Elective	4	YES	
PBIO 4181J Writing	3	YES	
Foreign Language	4	YES	
Major Elective ¹	3		
Total hours for semester	16		

Semester 6: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 49XX UG Research or Internship	2	YES	
Total hours for semester	2		

Semester 7: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 4170 Ethics	1	YES	
GEOL/BIOS Elective ²	3	YES	
PBIO 4380 Soils & Ecosystems	4	YES	
Arts & Sciences T3	3	YES	
PBIO 3190 Ohio Flora	3	YES	
Arts & Sciences Social Science	3		
Total hours for semester	17		

Semester 8: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 3240 Plant Breeding	3	YES	
PBIO 3240 Plant Physiology	4	YES	
PBIO 3150 Statistics	4	YES	
General Elective	3		
General Elective	3		
Total hours for semester	16		

* The estimated number of hours transferred or taken as AP is set at 12. Students with additional AP credits would be allowed to count them (as appropriate) to the 3-year degree pathway. Additionally, students may earn credit through successful language placement tests that would apply toward the degree.

¹ Major Electives- Choose from PBIO 3050 Plant Propagation, PBIO 3100 Fungi, PBIO 3160 Hort. Management, PBIO 3190 Ohio Flora, PBIO 3030 Medicinal Plants of Ohio, PBIO 3220 Tropical Plant Ecology or PBIO 4120 Plant Pathology if not already taken to satisfy another requirement.

² GEOL/BIOS Elective- Choose from GEOL 2150 Environmental Geology, GEOL 2310 Water and Pollution, BIOS 3160 Biogeography, BIOS 3760 Field Ecology, BIOS 4710 Ornithology, BIOS 4720 Herpetology, BIOS 4740 Mammalogy, BIOS 4650 Ichthyology, BIOS 4360 Field Ecology.

BA 2111 Field Ecology

Post-Secondary Coursework or Transfer/AP/IB Credit

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Tier II Fine Arts	3		
Tier II Cross Cultural Perspectives	3		
Tier II Humanities & Literature	3		
Tier I Quantitative Skills	3		
Tier II Social Science	3		
Total hours (minimum 15)	15		

Semester 1: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
MATH 1300 Tier I or II	4		
CHEM 1210 General Chemistry	4		C
PBIO 1140 Foundations of Plant Biology	4		
PBIO 2090 Introduction to Ecology	3		
General Elective	3		
Total hours for semester	18		

Semester 2: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Arts & Sciences Humanities 2XXX	3		
Freshman Composition	3		
PBIO 1150 Plant Structure & Function	4		
CHEM 1220 General Chemistry II	4		
Arts & Sciences Social Science	3		
Total hours for semester	17		

Semester 3: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Arts & Sciences Social Sciences	3		
Arts & Sciences Humanities	3		
Total hours for semester	6		

Semester 4: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 2XXX or above	3		
GEOL/GEOG Elective ¹	3		
PBIO 3190 Ohio Flora	3		
Arts & Sciences Social Science	3		
Foreign Language	4		
Total hours for semester	16		

Semester 5: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 3300 Genetics	3	YES	
PBIO 3400 Plant Development	4	YES	
PBIO 2XXX or above	3	YES	
Foreign Language	4		
PBIO 2XXX or above	3	YES	
Total hours for semester	17		

Semester 6: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 49XX UG Research or Internship	2	YES	
Total hours for semester	2		

Semester 7: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 4170 Ethics	1	YES	
BIOS Elective ²	3	YES	
PBIO 4180J Writing	3	YES	
Arts & Sciences T3	3	YES	
PBIO 4350 or 4380 Ecology	4	YES	
General elective	3		
Total hours for semester	17		

Semester 8: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
PBIO 3240 or 3260 Physiology	3	YES	
PBIO 3150 Statistics	4	YES	
PBIO 2XXX or above	4	YES	
Arts & Sciences Humanities	3		
General Elective	3		
Total hours for semester	16		

* The estimated number of hours transferred or taken as AP is set at 12. Students with additional AP credits would be allowed to count them (as appropriate) to the 3-year degree pathway. Additionally, students may earn credit through successful language placement tests that would apply toward the degree.

¹ GEOL/GEOG Electives- Choose one: GEOL 2150, 2310, 2550, GEOG 2680 (recommended), 3020.

² BIOS Elective- Choose one: BIOS 3160, 3210, 3760, 4290, 4310, 4360, 4650, 4710, 4720, 4740.