

BIOLOGY - ECOLOGY AND ENVIRONMENTAL BIOLOGY (BACHELOR OF SCIENCE)

Ecology and Environmental Biology is designed for those majors who plan to enter graduate school or have careers in ecological or environmental research, environmental assessment, or education.

Course	Title	Credits
Jax MIX General Education Curriculum		41

The requirements for the major in Biology are:

Course	Title	Credits
Freshman Biology Sequence		
BY 101	Introductory Biology I	3
BY 102	Introductory Biology II	3
BY 103	Introductory Biology Lab I	1
BY 104	Introductory Biology Lab II	1
Biology Core Courses		
BY 322	Genetics (WI)	4
BY 324	Introduction to Evolutionary Biology	3
BY 332	Ecology	4
BY 373	Cell Biology	4
Biology concentration (see requirements below)		15
Senior Seminar		
BY 496	Senior Seminar (WI)	1
Freshman Chemistry Sequence		
CY 105	General Chemistry I	3
CY 106	General Chemistry II	3
CY 107	General Chemistry Laboratory I	1
CY 108	General Chemistry Laboratory II	1
Organic Chemistry sequence		
CY 231	Organic Chemistry I	4
CY 232	Organic Chemistry II	4
Mathematics		
Select one of the following:		3-4
MS 113	Precalculus Trigonometry	
MS 125	Calculus I	
or higher		
Computer Science		
CS 201	Introduction to Information Technology	3
Physics Sequence		
PHS 201 & PHS 203	College Physics I and College Physics Laboratory Techniques I	4
PHS 202 & PHS 204	College Physics II and College Physics Laboratory Techniques II	4
Total Hours		69-70

The requirements for the concentration in Ecology and Environmental Biology are:

Course	Title	Credits
BY 300+ Electives		15
Total Hours		15

In addition to courses noted below, candidates for graduation must successfully complete all JSU Academic Regulations. **More information about Jax MIX requirements (<https://catalog.jsu.edu/undergraduate/jax-mix-requirements/>) and Alabama Transfers equivalents (<https://catalog.jsu.edu/undergraduate/alabama-transfers-equivalents/>) can be found in their respective section of the catalog.**

Freshman		
Fall		
		Hours
Jax MIX Communication: EH Composition sequence		3
BY 101 & BY 103	Introductory Biology I and Introductory Biology Lab I (Jax MIX Inquiry)	4
MS 112	Precalculus Algebra (Jax MIX Communication)	3
CY 105 & CY 107	General Chemistry I and General Chemistry Laboratory I	4
SSC 101	First Year Experience	0
Hours		14
Spring		
Jax MIX Communication: EH Composition sequence		3
BY 102 & BY 104	Introductory Biology II and Introductory Biology Lab II (Jax MIX Inquiry)	4
CY 106 & CY 108	General Chemistry II and General Chemistry Laboratory II	4
MS 113	Precalculus Trigonometry (or higher)	3
Hours		14
Sophomore		
Fall		
Jax MIX Expression: Literature		3
Jax MIX Experience: History sequence		3
Jax MIX Experience: Social/Behavioral Science		3
CY 231	Organic Chemistry I	4
Biology Core		4
Hours		17
Spring		
Jax MIX Expression: Literature		3
Jax MIX Experience: History sequence		3
CS 201	Introduction to Information Technology (or higher)	3
CY 232	Organic Chemistry II	4
Biology Core		4
Hours		17
Junior		
Fall		
EH 141	Speech (Jax MIX Communication)	3
PHS 201 & PHS 203	College Physics I and College Physics Laboratory Techniques I ¹	4
Biology Core		4
Biology Concentration Elective		4
Hours		15
Spring		
Jax MIX Experience: Social/Behavioral Science		3
PHS 202 & PHS 204	College Physics II and College Physics Laboratory Techniques II ¹	4
Biology Core		3
Biology Concentration Elective		4
Hours		14
Senior		
Fall		
Jax MIX Expression: Fine Arts		3

2 Biology - Ecology and Environmental Biology (Bachelor of Science)

Biology Concentration Elective	4
Electives	6
Hours	13
Spring	
BY 496 Senior Seminar (WI)	1
Biology Concentration Elective	3
Electives	12
Hours	16
Total Hours	120

¹ Students may elect to take calculus-based PHS 221 Physics for Scientists and Engineers I w/Lab (4)/PHS 222 Physics for Scientists and Engineers II w/Lab (4) in place of PHS 201 College Physics I (3)/PHS 202 College Physics II (3).