

# BIOLOGY - ORGANISMAL BIOLOGY (BACHELOR OF SCIENCE)

Organismal Biology is intended for those majors who plan graduate study in organismal biology (plant or animal biology), or who plan to pursue careers in biological education or conservation biology or as a naturalist.

Course	Title	Credits
<b>Jax MIX General Education Curriculum</b>		<b>41</b>

The requirements for the major in Biology are:

Course	Title	Credits
<b>Freshman Biology Sequence</b>		
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
<b>Biology Core Courses</b>		
BY 322	Genetics (WI)	4
BY 324	Introduction to Evolutionary Biology	3
BY 332	Ecology	4
BY 373	Cell Biology	4
<b>Biology concentration (see requirements below)</b>		<b>15</b>
<b>Senior Seminar</b>		
BY 496	Senior Seminar (WI)	1
<b>Freshman Chemistry Sequence</b>		
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
<b>Organic Chemistry sequence</b>		
CY 231	Organic Chemistry I	4
CY 232	Organic Chemistry II	4
<b>Mathematics</b>		
Select one of the following:		3-4
MS 113	Precalculus Trigonometry	
MS 125	Calculus I	
or higher		
<b>Computer Science</b>		
CS 201	Introduction to Information Technology	3
<b>Physics Sequence</b>		
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
<b>Total Hours</b>		<b>69-70</b>

The requirements for the concentration in Organismal Biology are:

Course	Title	Credits
BY 300+ Electives		15
<b>Total Hours</b>		<b>15</b>

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.**

<b>Freshman</b>		
<b>Fall</b>		
		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 (or higher - Jax MIX Communication)	3
CY 105 & CY 107	General Chemistry I and General Chemistry Laboratory I	4
SSC 101	First Year Experience	0
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
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
<b>Hours</b>		<b>14</b>
<b>Sophomore</b>		
<b>Fall</b>		
Jax MIX Expression: Literature		3
Jax MIX Experience: History sequence		3
CY 231	Organic Chemistry I	4
Biology Core		4
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Jax MIX Expression: Literature		3
Jax MIX Experience: History sequence		3
CS 201	Introduction to Information Technology	3
CY 232	Organic Chemistry II	4
Biology Core		4
<b>Hours</b>		<b>17</b>
<b>Junior</b>		
<b>Fall</b>		
EH 141	Speech (Jax MIX Communication)	3
PHS 201 & PHS 203	College Physics I and College Physics Laboratory Techniques I <sup>1</sup>	4
Biology Core		4
Biology Concentration Elective		4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Jax MIX Experience: Social/Behavioral Science		3
PHS 202 & PHS 204	College Physics II and College Physics Laboratory Techniques II <sup>1</sup>	4
Biology Core		3
Biology Concentration Elective		4
<b>Hours</b>		<b>14</b>
<b>Senior</b>		
<b>Fall</b>		
Jax MIX Expression: Fine Arts		3
Jax MIX Experience: Social/Behavioral Science		3

2 Biology - Organismal Biology (Bachelor of Science)

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

<sup>1</sup> 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).