

# BIOLOGY (BS)

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
<a href="https://bulletin.southalabama.edu/programs-az/arts-sciences/#generaleducationtext">https://bulletin.southalabama.edu/programs-az/arts-sciences/#generaleducationtext</a>		53-57
<b>Major Requirements</b>		<b>40</b>
<i>Biology Core</i>		
C or better is required for these six courses		
A. Complete the following:		
BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
B. Complete the following:		
BLY 300	Ecology	3
BLY 301	Cell Biology	3
BLY 302	Genetics	3
BLY 305	Introduction to Evolution	3
C. Students then must complete 20 hours of upper level Biology courses		20
<b>Other STEM Requirements</b>		
See list below.		
<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Other STEM Requirements

Code	Title	Hours
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
Select one of the following Options:		8-10
Option 1		
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
Option 2		
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	
Select one of the following Options:		4-7
Option 1		
MA 113 or MA 115	Precalculus Trigonometry or Precal Algebra-Trigonometry	

ST 210 or BLY 304	Stat Reason and Application Exp. Designs in Biology	
Option 2		
MA 125	Calculus I	
<b>Total Hours</b>		<b>24-29</b>

## Major Milestones

Effective for fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone table below.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

The sample academic plan viewable on the Major Milestone tab below is designed to ensure graduation in the Biology major in four years. Several academic plans are available – consult with your academic advisor for the plan that is the best fit for you. For specific course requirements, refer to the program requirements above and the General Education requirements of the College of Arts and Sciences.

## Biology Sample 4+Year Plan with Milestones

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I <sup>1</sup>	3
MA 115 or MA 113	Precal Algebra-Trigonometry <sup>1</sup> or Precalculus Trigonometry	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
BLY 121 & 121L	General Biology I and General Biology I Lab	4
<b>Milestone Notes</b>		
Must complete at least 12 hours with a 2.0 or higher GPA		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
ST 210	Stat Reason and Application	3
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
<b>Milestone Notes</b>		
EH 101 or EH 105	English Composition I <sup>1</sup> or Honors Composition - H	
CH 131	General Chemistry I (and lab with a grade of D or better) <sup>1</sup>	
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
BLY 300	Ecology	3
BLY 302	Genetics	3
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
Foreign Language I <sup>2</sup>		3
CA 110	Public Speaking <sup>2</sup>	3
<b>Milestone Notes</b>		

BLY 121	General Biology I (and lab with a grade of C or better) <sup>1</sup>	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
BLY 301	Cell Biology	3
BLY 305	Introduction to Evolution	3
Foreign Language II <sup>2</sup>		3
English Literature <sup>2</sup>		3
History (US or West. Civ.) <sup>2</sup>		3
<b>Milestone Notes</b>		
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab (with a grade of D or better)	
Select one of the following with a grade of C or better:		
BLY 300	Ecology	
BLY 301	Cell Biology	
BLY 302	Genetics	
BLY 305	Introduction to Evolution	
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Biology Elective 300 level or higher		4
Biology Elective 300 level or higher		3
Select one of the following:		4
GY 111 & 111L	Physical Geology and Physical Geology Lab	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
Fine Arts Elective <sup>2</sup>		3
<b>Milestone Notes</b>		
Select one of the following with a grade of C or better:		
BLY 300	Ecology	
BLY 301	Cell Biology	
BLY 302	Genetics	
BLY 305	Introduction to Evolution	
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Biology Elective 300 level or higher		3
Biology Elective 300 level or higher		3
Select one of the following:		4
GY 112 & 112L	Earth History and Earth History Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
Social/ Behavioral Elective <sup>2,3</sup>		3
Minor		3
<b>Milestone Notes</b>		
Apply for graduation		
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Biology Elective 300 level or higher		3
Humanities Elective <sup>2,3</sup>		3
Social/ Behavioral Elective <sup>2</sup>		3
Minor		3
Minor		3
<b>Milestone Notes</b>		
Complete a total of at least 12 upper division (300-400) Biology elective hours		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Biology Elective 300 level or higher		4
Humanities Elective <sup>2</sup>		3
Social/ Behavioral Elective <sup>2</sup>		3
Minor		3

**Milestone Notes**

Complete a total of at least 20 upper division (300-400) Biology elective hours	
<b>Hours</b>	<b>13</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Students who earn an English ACT score of 27 or above, SAT score of 610 or above on the verbal portion, or a new SAT Reading Test can opt out of EH 101.

<sup>2</sup> Courses meet general education requirements.

<sup>3</sup> Must have one history elective and one literature elective. In addition, students must choose a second history or literature to complete a two-part sequence.

**Major Milestone Notes**

- Students with ACT Math scores 22-23 should take MTH 100 and MA 112 in the first semester, and they will graduate with 123 hours; MA 125 also satisfies the math requirement. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.
- There may be additional prerequisites for upper level major electives. Refer to the bulletin for more information.
- All Arts and Sciences majors require a minor between 18 and 24 hours. Courses used in a minor can also be used for general education requirements or major requirements (up to two courses).
- Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.
- The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.