

# BIOLOGY (BS) - SENIOR THESIS CONCENTRATION

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
https://bulletin.southalabama.edu/programs-az/arts-sciences/#generaleducationtext		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	Precalculus Trigonometry
or MA 115	Precal Algebra-Trigonometry
ST 210	Stat Reason and Application
or BLY 304	Exp. Designs in Biology
Option 2	
MA 125	Calculus I
<b>Total Hours</b>	<b>24-29</b>

### Notes:

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 tab above.

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.

## Additional Information

The Biology Senior Thesis Program offers bright, academically motivated undergraduate students the opportunity to develop research and communication skills in preparation for a graduate or professional career. To apply for admission into the program, a student must:

1. have completed BLY 121, BLY 121L, BLY 122, BLY 122L, CH 131, CH 132, plus one more upper division biology course.
2. have earned a 3.25 GPA or better in biology courses attempted.
3. have earned a 3.0 GPA or better overall.
4. obtain a recommendation from a faculty member.

In addition to fulfilling the requirements of the standard biology program, senior thesis students must:

1. participate in the Undergraduate Senior Thesis in Biology program for three terms; this may include summer terms.
2. complete a minimum of six credits of directed research, three credits of which must be Honors Research in Biology (BLY 499).
3. complete a research prospectus including an introduction, proposed methods, and relevant literature citations. The prospectus must be submitted and approved by their advisory committee during the first term of participation in the program.
4. complete a written thesis, which must be approved by the advisory committee.
5. present a public oral defense of the research project.
6. complete a poster presentation at the USA Annual Research Forum or the UCUR Annual Research Forum.

Students participating in the Biology Senior Thesis Program who have a 3.5 GPA will also be eligible for Departmental Honors status.

Biology students who are part of the University Honors College will meet requirements for the Undergraduate Biology Senior Thesis as well as those of the University's program.