

Biology (BS)

Degree Requirements

General Education Requirements (48 Hours)

Area I - Written Composition (2 Courses, 6 Hours)

- A. 3 hours: EH 101
- B. 3 hours: EH 102

Area II - Humanities & Fine Arts (5 Courses, 12 Hours)

- A. 3 hours: CA 110
- B. 3 hours from: EH 215, EH 216, EH 225, EH 226, EH 235, EH 236
- C. 3 hours from: ARH 100, ARH 103, ARH 123, ARS 101, DRA 110, MUL 101
- D. 6 hours from: AFR 101, ARH 100, ARH 103, ARH 123, ARH 203, ARS 101, CLA 110, DRA 110, EH 215, EH 216, EH 225, EH 226, EH 235, EH 236, LG 101, LG 102, LG 111, LG 112, LG 121, LG 122, LG 131, LG 132, LG 141, LG 142, LG 151, LG 152, LG 153, LG 171, LG 172, LG 173, LG 201, LG 202, LG 211, LG 212, LG 213, LG 221, LG 222, LG 231, LG 232, LG 234, LG 241, LG 242, 251, LG 252, LG 271, LG 272, LG 273, LGS 101, LGS 102, LGS 106, LGS 107, LGS 110, LGS 111, LGS 131, LGS 141, LGS 142, LGS 161, LGS 162, LGS 171, LGS 172, LGS 181, LGS 182, LGS 201, LGS 202, LGS 206, LGS 207, LGS 210, LGS 211, LGS 241, LGS 242, LGS 261, LGS 262, LGS 281, LGS 282, MUL 101, PHL 110, PHL 120, PHL 121, PHL 131, PHL 231, PHL 240, REL 100, REL 200, REL 201

Area III – Natural Sciences & Mathematics (3 Courses & Labs, 11-14 Hours)

- A. 3-4 hours from: MA 110, MA 112, MA 113, MA 115, MA 120, MA 125, MA 126, MA 227, MA 237, MA 238
- B. 8-10 hours from: AN 121 & AN 121L, BLY 101 & BLY 101L or BLY 121 & BLY 121L, BLY 102 & BLY 102L or BLY 122 & BLY 122L, CH 101 & CH 101L, CH 103 & CH 103L, CH 131 & CH 131L, CH 132 & CH 132L, GEO 101 & GEO 101L, GEO 102 & GEO 102L, GY 111 & GY 111L, GY 112 & GY 112L, MAS 134 & MAS 134L, PH 101 & PH 101L, PH 104 & PH 104L, PH 114 & PH 114L, PH 115 & PH 115L, PH 201 & PH 201L, PH 202 & PH 202L

Area IV – History, Social & Behavioral Sciences (4 Courses, 12 Hours)

- A. 3 hours from: HY 101, HY 102, HY 135, HY 136
- B. 9 hours from: AN 100, AN 101, CA 100, CA 211, CJ 105, ECO 215, ECO 216, GEO 114, GEO 115, GS 101, HY 101, HY 102, HY 135, HY 136, IS 100, IST 201, NAS 101, PSC 130, PSY 120, PSY 250, SY 109, SY 112

Area V (3 Courses, 9-10 Hours)

- A. Foreign Language. 6 hours from any one group:

LG 101 and LG 102, LGS 106 and LGS 107, LGS 110 and GLS 111, LG 111 and LG 112 or proficiency test or LG 113, LG 121 and LG 122, LG 131 and LG 132 or proficiency test or LG 134, LGS 131 and LGS 132, LG 141 and LG 142, LGS 141 and LGS 142, LG 151 and LG 152 or proficiency test or LG 153, LGS 161 and LGS 162, LG 171 and LG 172 or LG 173, LGS 171 and LGS 172, LGS 181 and LGS 182

Students may fulfill the foreign language requirement by passing a proficiency test offered by the Department of Modern and Classical Languages at the level equivalent to the second semester of the foreign language sequence, or by passing another test (e.g., AP (Advanced Placement) or CLEP (College Level Examination Program) at the equivalent level). Students who pass a proficiency test at the level equivalent to first semester of the foreign language sequence are required to complete only the second semester and will fulfill the foreign language requirement with 3 credit hours of course work.

- B. Natural Sciences/Math. 3-4 hour lab science or math/stat course from:

AN 121 & AN 121L, BLY 101 & BLY 101L or BLY 121 & BLY 121L, BLY 102 & BLY 102L or BLY 122 & BLY 122L, CH 101 & CH 101L, CH 103 & CH 103L, CH 131 & CH & CH 131L, CH 132 & CH 132L, GEO 101 & GEO 101L, GEO 102 & GEO

102L, GY 111 & GY 111L, GY 112 & GY112L, MAS 134 & MAS 134L, PH 101 & PH 101L, PH 104 & PH 104L, PH 114 & PH 114L, PH 115 & PH 115L, PH 201 & PH 201L, PH 202 & PH 202L, ST 210, MA 113- 299 (except 201 and 202).

Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136)

All undergraduates must complete two designated writing credit (W) courses

Major Requirements (37 Hours)

Biology Core (5 Courses, 17 Hours)

1. 8 hours: BLY 121/BLY 121L, BLY 122/BLY 122L
2. 9 hours from: BLY 301, BLY 302, BLY 303

(Note: a C or better is required for these five courses)

C. 20 hours: Students then must complete 20 hours of upper level Biology courses (12 of which are taken from a selection of upper level Biology courses listed below)

Other STEM requirements (26-29 Hours)

CH 131/CH 131L, CH 132/CH 132L, CH 201/CH 201L

PH 114/PH 114L and PH 115/PH 115L or GY 111/GY 111L and GY 112/GY 112L

MA 115 and ST 210 or MA 125 or BLY 304

Minor Requirements (18-24 Hours)

A minor is required for this degree program.

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

Term 1	Course Description	Pre-req	Cr Hrs	Milestone Notes
CAS 100	First Yr Exp - College Success		2	Must complete at least 12 hours with a 2.0 or higher GPA
EN 101*	English Composition I		3	

MA 115*/MA 113	Precal Algebra-Trigonometry	ACT Math 25	4	
CH 131/CH 131L	General Chemistry I	ACT Math 24	4	
BLY 121/BLY 121L	General Biology I	ACT Math 22	4	
			17	

Term 2	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 102 or Honors	English Composition II	EH 101 or test score	3	EH 101 or EH 105*
ST 210	Stat Reason and Application		3	CH 131 and lab with a grade of D or better*
CH 132/CH 132L	General Chemistry II	CH 131	4	
BLY 122/BLY 122L	General Biology II	BLY 121	4	
			14	

Term 3	Course Description	Pre-req	Cr Hrs	Milestone Notes
BLY 301	Cell Biology	BLY 122 and CH 131	3	BLY 121 and lab with a grade of C or better*
BLY 302	Genetics	BLY 122 and CH 131	3	
CH 201/CH 201L	Organic Chemistry I	CH 132	4	
Foreign Language I			3	
CA 110	Public Speaking		3	
			16	

Term 4	Course Description	Pre-req	Cr Hrs	Milestone Notes
BLY 303	Ecology and Evolution	BLY 122 and CH 131	3	BLY 301 or BLY 302 or BLY 303 with a grade of C or better
Minor/Elective			3	CH 201 and lab with a grade of D or better

Foreign Language II		3
English Literature	EH 102 or Honors	3
History (US or West. Civ.)		3
		15

Term 5	Course Description	Pre-req	Cr Hrs	Milestone Notes
Biology Elective	300 level or higher	BLY 301, BLY 302 and BLY 303***	4	BLY 301, BLY 302, and BLY 303 with a grade of C or better
Biology Elective	300 level or higher	BLY 301, BLY 302, and BLY 303***	3	
GY 111/GY 111L or PH 114/PH 114L	Geology or Physics sequence required		4	
Fine Arts Elective			3	
			14	

Term 6	Course Description	Pre-req	Cr Hrs	Milestone Notes
Biology Elective	300 level or higher	BLY 301, BLY 302, and BLY 303***	3	Apply for graduation
Biology Elective	300 level or higher	BLY 301, BLY 302, and BLY 303***	3	
GY 112/GY 112L or PH 115/PH 115L	Geology or Physics sequence required		4	
Social/ Behavioral Elective**			3	
Minor			3	
			16	

Term 7	Course Description	Pre-req	Cr Hrs	Milestone Notes
Biology Elective	300 level or higher	BLY 301, BLY 302, and BLY 303***	4	Complete a total of at least 12 upper division (300-400)

Biology
elective hours

Humanities Electives**	3
Social/ Behavioral Elective	3
Minor	3
Minor	3
	16

Term 8	Course Description	Pre-req	Cr Hrs	Milestone Notes
Biology Elective	300 level or higher	BLY 301, BLY 302, and BLY 303***	4	Complete a total of at least 20 upper division (300-400) Biology elective hours
Humanities Elective			3	
Social/ Behavioral Elective			3	
Minor			3	
			13	
			Total degree hours = 121	

All bolded courses meet general education requirements.

- **Students with ACT Math scores 22-23 should take CH 100 and MA 112 in the first semester, and they will graduate with 128 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.**

* 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.

** 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.

*** 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.

Department Information

Department of Biology website
<https://www.southalabama.edu/biology>

Undergraduate Studies

The program of the Department of Biology is designed to contribute to a scientific background as part of a liberal education. The department offers a diversified, broadly based program, which can be designed to satisfy many areas of study. Our multitrack major can provide the traditional student with a well-rounded background in biology, or students may select courses to prepare them for a particular area of study. The multitrack curriculum can prepare students for graduate study, pre-health professional fields (such as medicine or dentistry), marine biology, or environmental science. The department has persons trained to advise in each of these areas. A list of advisors for a specific track or area of study can be obtained from the departmental office.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students, who must enroll in the fall semester following entry.

Biology majors are required to take CIS 150, BLY 304 or ST 210 to fulfill the technology proficiency requirement, which was formerly known as the computer proficiency requirement.

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