

Major in Biology (BS) – Marine Biology Option

120 hours

University Requirement – 2 hours

GSTD 1002 Freshman Seminar

General Education – 24 hours (Mathematics, natural science and physical science courses are included in the major.)

Biology – 36 hours

BIOL	1203/1201	Principles of Biology I/Lab
BIOL	1213/1211	Principles of Biology II/Lab
BIOL	2083/2081	General Botany/Lab
BIOL	2113/2111	General Zoology/Lab
BIOL	3032/3022	General Microbiology/Lab
BIOL	3033/3031	Genetics/Lab
BIOL	3763	Evolutionary Biology
BIOL	4013/4011	Ecology/Lab
BIOL	4101	Biology Colloquium

Select 4 hours from the following:

BIOL	3083/3081	Plant Physiology/Lab
BIOL	3703/3701	Vertebrate Physiology/Lab

Marine Biology – 20 hours

BIOL	3503	Marine Biology
BIOL	3843	Oceanography

Select 4 hours from the following:

BIOL	3343/3341	Field Experiences/Lab
BIOL	3393/3391	Biology of Fishes/Lab

Marine Science Electives – 10 hours

Select any 10 hours of upper-level marine science electives at an affiliate institution that do not repeat courses taken at SAU. SAU has an affiliate agreement with The University of Southern Mississippi's Gulf Coast Research Laboratory (GCRL) and will also accept courses taken at Dauphin Island Sea Lab (DISL). Descriptions and prerequisites for GCRL classes are listed online at gcr.usm.edu and disl.org. Students incur the costs of tuition differences between SAU and affiliate institutions, but may apply to transfer financial aid to offset costs.

Chemistry – 12 hours

CHEM	1023/1021	University Chemistry I/Lab
CHEM	1123/1121	University Chemistry II/Lab
CHEM	3003/3001	Organic Chemistry I/Lab

Mathematics – 13-14 hours

Option A:

MATH	1023	College Algebra
MATH	1033	Plane Trigonometry
MATH	1525	Calculus I
MATH	3043	Introduction to Applied Probability and Statistics

Option B:

MATH	1045	Pre-Calculus Mathematics
MATH	1525	Calculus I
MATH	3043	Introduction to Applied Probability and Statistics

Physics – 8 hours

PHYS	2003/2001	College Physics I/Lab
PHYS	2103/2101	College Physics II/Lab

or

PHYS	2203/2201	University Physics I/Lab
PHYS	2213/2211	University Physics II/Lab

Electives – 5-6 hours

University electives may be used for remaining hours.

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Suggested Plan of Study

2018-2019 Catalog

Fall - Semester 1		Spring - Semester 2	
ENGL 1113 Composition I	3	ENGL 1123 Composition II	3
MATH 1023 College Algebra	3	MATH 1033 Plane Trigonometry	3
BIOL 1203/1201 Principles of Biology I/Lab	4	BIOL 1213/1211 Principles of Biology II/Lab	4
CHEM 1023/1021 University Chemistry I/Lab	4	CHEM 1123/1121 University Chemistry II/Lab	4
GSTD 1002 Freshman Seminar	2		
Total Semester Hours	16	Total Semester Hours	14
Fall - Semester 3		Spring - Semester 4	
BIOL 2083/2081 General Botany/Lab	4	BIOL 2113/2111 General Zoology/Lab	4
BIOL 3033/3031 Genetics/Lab	4	BIOL 3763 Evolutionary Biology	3
BIOL 4013/4011 Ecology/Lab	4	MATH 1545 Calculus I	5
MATH 3043 Introduction to Probability and Statistics	3	World Literature I/II (ENGL 2213 or ENGL 2223)	3
Total Semester Hours	15	Total Semester Hours	15
Fall - Semester 5		Spring - Semester 6	
BIOL 3503 Marine Biology	3	BIOL 3843 Oceanography	3
CHEM 3003/3001 Organic Chemistry I/Lab	4	BIOL 3032/3022 General Microbiology/Lab	4
PHYS 2003/2001 College Physics I/Lab or PHYS 2203/2201 University Physics I/Lab	4	PHYS 2103/2101 College Physics II/Lab or PHYS 2213/2211 University Physics II/Lab	4
Fine Arts/Humanities (ART 2013, HUM 2003, ENGL 2213, ENGL 2223, MUS 2003 or MUS 2013, PHIL 2403, or THEA 2003)	3	BIOL 3343 Field Experiences/Lab or BIOL 3393/3391 Biology of Fishes/Lab	4
Total Semester Hours	14		15
Fall - Semester 7		Spring - Semester 8	
BIOL 3703/3701 Vertebrate Physiology/Lab	4	BIOL 4101 Biology Colloquium	1
Free Electives	3	Free Electives	2
*HIST 1003 or 1013 World History I or II OR HIST 2013 or 2023 U.S. History I or II or PSCI 2003 American Government: National	3	*HIST 1003 or 1013 World History I or II OR HIST 2013 or 2023 U.S. History I or II or PSCI 2003 American Government: National	3
Social Science choice (ECON 2103, FIN 2003, GEOG 2003, PSCI 2003, PSYC 2003, SOC 1003 or SOC 2003)	3	Marine Science Electives	10
Fine Arts/Humanities (ART 2013, HUM 2003, ENGL 2213, ENGL 2223, MUS 2003 or MUS 2013, PHIL 2403, or THEA 2003)	3		
Total Semester Hours	16	Total Semester Hours	16

Total hours required for major – 120

*Note: Must have six hours of history/government. Three hours must be World History I or II. Three hours must be U.S. History I, U.S. History II or American Government: National.