

**IN EFFECT FALL 2021****MARINE BIOLOGY CURRICULUM (MARB)****FRESHMAN YEAR**

ENGL 1100 English Comp I .....	3	ENGL 1120 English Comp II .....	3
<b>BIOL 1020 Principles of Biology .....</b>	<b>3</b>	<b>BIOL 1030 Organismal Biology .....</b>	<b>3</b>
<b>BIOL 1021 Principles of Biology Lab.....</b>	<b>1</b>	<b>BIOL 1031 Organismal Biology Lab.....</b>	<b>1</b>
CHEM 1030 Fund. of Chemistry I .....	3	CHEM 1040 Fund. of Chem II .....	3
CHEM 1031 Fund. of Chem. I Lab .....	1	CHEM 1041 Fund. of Chem II Lab.....	1
CORE SOCIAL SCIENCE.....	3	MATH 1610 Calculus I .....	4
<b>BIOL 2100 Professional Development.....</b>	<b>1</b>		
	15		15

**SOPHOMORE YEAR**

PHYS 1500 General Physics I .....	4	PHYS 1510 General Physics II.....	4
<b>BIOL 3000 Genetics.....</b>	<b>3</b>	<b>BIOL 3030 Evolution &amp; Systematics .....</b>	<b>3</b>
<b>BIOL 3001 Genetics Lab.....</b>	<b>1</b>	<b>BIOL 3040 Biol. of Marine Systems .....</b>	<b>3</b>
CORE LITERATURE .....	3	CHEM 2030 Survey of Organic Chem.....	3
CORE HISTORY .....	3		
	14		13

**Summer Marine Lab .....** 8

**JUNIOR YEAR**

<b>BIOL 3200 General Microbiology.....</b>	<b>3</b>	<b>BIOL 3060 Principles of Ecology.....</b>	<b>4</b>
<b>BIOL 3201 General Microbiology Lab.....</b>	<b>1</b>	<b>BIOL 4100 Cell Biology.....</b>	<b>3</b>
<b>BIOL 4010 Invert. Biodiversity .....</b>	<b>4</b>	STAT 2510 Stats. For Biol/Health .....	3
CORE LITERATURE or HIST <sup>1</sup> .....	3	CORE SOCIAL SCIENCE or HUM <sup>2</sup> .....	3
BCHE 3200 Prin. of Biochemistry .....	3		
	14		13

**Summer Marine Lab .....** 8

**SENIOR YEAR**

<b>Physiology Elective .....</b>	<b>3</b>	<b>BIOL 4950 Senior Seminar .....</b>	<b>1</b>
<b>Eco/Evol/Diversity Elect.....</b>	<b>3</b>	<b>BIOL Elective .....</b>	<b>3</b>
CORE HUMANITIES.....	3	<b>MMCB Elect .....</b>	<b>3</b>
CORE FINE ARTS .....	3	CORE SOCIAL SCIENCE .....	3
BIOL 4AA0 Professional Development II.....	0	UNIV 4AA0 SM1*.....	0
	12		10

**TOTAL HOURS 122**

Long range schedules for COSAM courses are online at [www.auburn.edu/cosam/students/](http://www.auburn.edu/cosam/students/)

Courses in **BOLD** will be used to calculate GPA in major.

Options for courses labeled CORE are in the Auburn University Bulletin ([www.auburn.edu/bulletin](http://www.auburn.edu/bulletin)) under Core Curriculum.

<sup>1</sup> Students must complete a two-course sequence in either HIST or LIT (for example, World History 1 and 2 or American Lit 1 and 2). For complete HIST and LIT sequence options, see the Bulletin.

<sup>2</sup> If a LIT sequence is chosen, this course must be a CORE SOCIAL SCIENCE. If a HIST sequence is chosen, this course must be a CORE HUMANITIES.

\*Must be taken semester of graduation

### **MMCB Electives:**

BIOL 3020 Genomic Biology 4 hrs. SP  
BIOL 4101 Cell Biology Lab, 2 hrs. SP FA  
BIOL 5110 Parasitology 4 hrs. FA  
BIOL 5220 Introductory Molecular Genetics, 3 hrs. SP FA  
BIOL 5260 Prokaryotic Molecular Genetics 3 hrs. FA  
BIOL 5210 Microbial Physiology 3 hrs. SP  
BIOL 5330 Developmental Genetics, 3 hrs. SP

### **Eco/Evo/Diversity Electives:**

BIOL 3010 Comparative Anatomy 4 hrs. FA SP  
BIOL 5090 Conservation Biology, 3 hrs. FA  
BIOL 5140 Plant Ecology 4 hrs. SP  
BIOL 5650 Animal Behavior 3 hrs. FA  
NATR 5250 Wetland Ecology & Management 3 hrs. SP

### **Anatomy & Physiology Electives:**

BIOL 5240 Animal Physiology, 4 hrs. FA  
BIOL 5600 Biomedical Physiology 5 hrs. FA SP  
BIOL 5210 Microbial Physiology 3 hrs. SP

### **Biology Electives (In addition to courses listed above that starts with BIOL):**

BIOL 2500 Anatomy and Physiology I 3 hrs. SP FA  
BIOL 2501 Anatomy and Physiology I Lab 1 hr. SP FA  
BIOL 2510 Anatomy and Physiology II 3 hrs. SP FA  
BIOL 2511 Anatomy and Physiology II Lab 1 hrs. SP FA  
BIOL 4000 Histology, 3 hrs. SP FA  
BIOL 4001 Histology lab, 1 hrs. SP FA  
BIOL 4020 Vertebrate Biodiversity, 4 hrs. FA  
BIOL 4410 Vertebrate Development, 5 hrs.  
BIOL 4920 Internship in Biology 6 hrs. max SP FA  
BIOL 4970 Special Topics variable hrs. SP FA  
BIOL 4980 Undergraduate Research 6 hrs. max SP FA  
BIOL 5110 Parasitology, 4 hrs.  
BIOL 5120 Systematic Botany, 4 hrs. SP  
BIOL 5140 Plant Ecology, 4 hrs.  
BIOL 5380 General Ichthyology, 4 hrs.  
BIOL 5600 Biomedical Physiology, 5 hrs.  
BIOL 5740 Herpetology, 4 hrs. SP  
BIOL 5750 Ornithology, 4 hrs. SP  
BIOL 5760 Mammalogy, 4 hrs.  
FISH 5210 Principles of Aquaculture, 3 hrs.  
FISH 5220 Water Science, 3 hrs.  
FISH 5320 Limnology, 4 hrs.  
FISH 5410 Intro. to Fish Health, 2 hrs.  
FISH 5510 Fisheries Biology and Management, 3 hrs.  
FISH 5630 Facilities for Aquaculture, 3 hrs.  
BIOL 5800 Intro to Computational Bio 3 hrs. FA  
APBT 3100 Applied Biotechnology I 4 hrs. SP

### **Marine Biology Summer Electives**

Students are expected to enroll in courses at marine field stations to gain practical and theoretical knowledge in Marine Sciences. Auburn University has a formal consortium agreement with both Dauphin Island Sea Lab (DISL; [www.disl.org](http://www.disl.org)) and Gulf Coast Research Laboratory (GCRL; [www.usm.edu/gcrl](http://www.usm.edu/gcrl)). Alternatively, a student may seek enrollment at an alternative lab. Due to the nature of the consortium agreements and courses at marine labs, the schedule of offered courses can change slightly on an annual basis. Typically, any marine-related course offered by DISL or GCRL is an eligible elective. Student should consult the web pages of these labs for recent offerings. Any elective taken at a marine field station must be approved, prior to application to the course, by the Marine Biology Liaison.