

**IN EFFECT FALL 2009****MARINE BIOLOGY CURRICULUM (MARB)****FRESHMAN YEAR**

ENGL 1100 English Comp I..... 3	ENGL 1120 English Comp II.....3
<b>BIOL 1020/1021 Principles of Biology ..... 4</b>	<b>BIOL 1030/1031 Organismal Biology.....4</b>
CHEM1030 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
MATH 1610 Calculus I..... 4	CORE SOC SCI GROUP I .....3
15	14

**SOPHOMORE YEAR**

PHYS 1500/1501 General Physics I..... 4	PHYS 1510/1511 General Physics II.....4
<b>BIOL 3000 Genetics ..... 4</b>	<b>BIOL 3060 Principles of Ecology.....4</b>
ENGL 2200 World Literature I.....3	<b>BIOL 3040 Biol. of Marine Systems .....3</b>
CORE HISTORY I..... 3	CHEM 2030 Survey of Organic Chem....3
14	14

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

**JUNIOR YEAR**

<b>BIOL 3030 Evolution &amp; System..... 3</b>	<b>BIOL 3200 General Microbiology.....4</b>
<b>BIOL 4010 Invert. Biodiversity.....4</b>	<b>BIOL 4100 Cell Biology.....3</b>
ENGL 2210 World Literature II..... 3	STAT 2510 Stats. for Biol/Health.....3
BCHE 3200 Prin. Of Biochemistry.....3	CORE HISTORY II.....3
13	13

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

**SENIOR YEAR**

<b>BIOL Physiology Elective..... 4</b>	<b>BIOL 4950 Undergrad. Seminar ..... 1</b>
<b>BIOL Ecology &amp; Evol. Elect.....3</b>	<b>BIOL Biology Elective .....3</b>
CORE PHILOSOPHY .....3	<b>BIOL Molecular Biol. Elect. ....3</b>
CORE FINE ARTS .....3	CORE GROUP SOCIAL SCIENCE II....3
13	10

**TOTAL HOURS 122**

Long range schedules for COSAM courses are online at [www.auburn.edu/cosam/students/registration/](http://www.auburn.edu/cosam/students/registration/)  
Courses in **BOLD** will be used to calculate GPA in major.

Options for courses labeled CORE are in the Auburn University Bulletin, under Core Curriculum.

\*Approved Biology Electives and Marine Electives are on the back of this sheet.

All courses taken at a Summer Marine Lab must receive departmental approval.

\*\*See back.

## **ELECTIVE COURSES FOR MARINE BIOLOGY MAJOR (MARB)**

### **Molecular Electives:**

BIOL 4101 Cell Biology Lab, 2 hrs.  
BIOL 5220 Introductory Molecular Genetics, 3 hrs.  
BIOL 5020 Developmental Biology, 3 hrs.  
BIOL 5370 Molecular Ecology, 3 hrs  
BIOL 4970 Special Topics, 1-4 hrs.- Requires approval by faculty advisor

### **Ecology and Evolution Electives:**

BIOL 5090 Conservation Biology, 3 hrs.  
BIOL 5510 Biogeography, 3 hrs.  
BIOL 5550 Wetland Biology, 4 hrs.  
BIOL 5110 Community Ecology, 3 hrs.  
BIOL 4970 Special Topics 1-4 hrs – Requires approval by faculty advisor

### **Physiology Electives:**

BIOL 5240 Animal Physiology, 4 hrs.  
BIOL 4970 Special Topics, 1-4 hrs – Requires approval by faculty advisor

### **Biology Electives (In addition to alternatives listed above for topical electives)**

BIOL 4000 Histology, 4 hrs.  
BIOL 4020 Vertebrate Biodiversity, 4 hrs.  
BIOL 5300 Plant Anatomy and Dev., 4 hrs.  
BIOL 5320 Plant Gene Expression, 4 hrs.  
BIOL 4410 Vertebrate Development, 5 hrs.  
BIOL 5740 Herpetology, 4 hrs.  
BIOL 5750 Ornithology, 4hrs.  
BIOL 4980 Undergraduate Research, maximum of 4 hrs.  
BIOL 5110 Parasitology, 4 hrs.  
BIOL 5120 Systematic Botany, 4 hrs.  
BIOL 5140 Plant Ecology, 4 hrs.  
BIOL 5160 Field Biology and Ecology, var. hrs.  
BIOL 5340 Protozoology, 4 hrs.  
BIOL 5380 General Ichthyology, 4 hrs.  
BIOL 5600 Mammalian Physiology, 6 hrs.  
BIOL 5650 Ethology, 4 hrs.  
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.

### **Marine Biology Summer Electives**

Students are expected to enroll in courses at marine field stations to gain practical and theoretical knowledge in the area of study. 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.

