IN EFFECT FALL 2014

MARINE BIOLOGY CURRICULUM (MARB)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>Sophomore Year</th>
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<tbody>
<tr>
<td>ENGL 1100 English Comp I ................................</td>
<td>PHYS 1500 General Physics I..............................</td>
</tr>
<tr>
<td>BIOL 1020/1021 Principles of Biology ...............</td>
<td>PHYS 1510 General Physics II.........................</td>
</tr>
<tr>
<td>CHEM 1030 Fund. of Chemistry I .....................</td>
<td>CORE LITERATURE .........................................</td>
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<td>CHEM 1031 Fund. of Chem. I Lab .....................</td>
<td>CORE HISTORY ............................................</td>
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<tr>
<td>MATH 1610 Calculus I ..................................</td>
<td>BCHE 3200 Prin. Of Biochemistry .......................</td>
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Summer Marine Lab 5 ........................................ 8

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<tr>
<th>JUNIOR YEAR</th>
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<tbody>
<tr>
<td>BIOL 3030 Evolution &amp; System .......................</td>
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<tr>
<td>BIOL 4010 Invert. Biodiversity ........................</td>
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<tr>
<td>CORE LITERATURE or HIST ..........................3</td>
</tr>
<tr>
<td>BCHE 3200 Prin. Of Biochemistry .......................</td>
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Summer Marine Lab 5 ........................................ 8

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<th>SENIOR YEAR</th>
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<tbody>
<tr>
<td>BIOL Physiology Elective ..........................4</td>
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<tr>
<td>BIOL Eco/Evol/Diversity Elect ......................</td>
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<tr>
<td>CORE HUMANITIES ......................................</td>
</tr>
<tr>
<td>CORE FINE ARTS ..........3</td>
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BIOL 4950 Undergrad. Seminar ........................1
BIOL Elective .................................4
MMCB Elect .................................3
CORE SOCIAL SCIENCE2 ........................3
10

TOTAL HOURS 122

Long range schedules for COSAM courses are online at 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) under Core Curriculum.

1 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.

2 Students who have AP or transfer credit for US History should talk to an advisor about CORE SOC SCI choices.

3 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.

4 Approved Biology electives are on the back of this sheet.

5 All courses taken at a Summer Marine Lab must receive departmental approval. See back of this sheet.
ELECTIVE COURSES FOR MARINE BIOLOGY MAJOR (MARB)

**MMCB Electives:**
- BIOL 3020 Genomic Biology
- BIOL 4101 Cell Biology Lab, 2 hrs.
- BIOL 5220 Introductory Molecular Genetics, 3 hrs.
- BIOL 5270 Host-Microbe Interactions 3 hrs.
- BIOL 5020 Developmental Biology, 3 hrs.
- BIOL 5330 Developmental Genetics, 3 hrs.
- BIOL 5370 Molecular Ecology, 3 hrs.
- BIOL 5260 Prokaryotic Molecular Genetics
- BIOL 5210 Microbial Physiology
- BIOL 5700 Applied and Environmental Microbiology

**Eco/Evo/Diversity Electives:**
- BIOL 5090 Conservation Biology, 3 hrs.
- BIOL 5350 Behavioral Ecology
- BIOL 5360 Population Ecology
- BIOL 5650 Microbial Diversity and Evolution
- BIOL 5510 Biogeography, 3 hrs.
- BIOL 5110 Community Ecology, 3 hrs.

**Physiology Electives:**
- BIOL 5240 Animal Physiology, 4 hrs.
- BIOL 5600 Biomedical Physiology 6 hrs.

**Biology Electives (In addition to courses listed above for topical electives)**
- BIOL 4000 Histology, 4 hrs.
- BIOL 4020 Vertebrate Biodiversity, 4 hrs.
- BIOL 4920 Internship in Biology
- BIOL 4970 Special Topics, 1-4 hrs – Requires approval by faculty advisor
- BIOL 4980 Undergraduate Research, maximum of 6 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 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 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) and Gulf Coast Research Laboratory (GCRL; 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.