

## BS Biology – Marine Biology Area of Emphasis Checksheet:

(Fall 2026)

(check Degreeworks and the Bulletin for Franklin College, University, and other core requirements)

### Core pre-requisites and Area VI:

- ☐ BIOL 1107 Principles of Biology I 3 AND BIOL 1107L Principles of Biology I Laboratory 1
  - ☐ CHEM 1211-1211D General Chemistry I 3 AND CHEM 1211L General Chemistry Laboratory I 1
  - ☐ CHEM 1212-1212D General Chemistry II 3 AND CHEM 1212L General Chemistry Laboratory II 1
  - ☐ CHEM 2211-2211D Modern Organic Chemistry I 3 AND CHEM 2211L Modern Organic Chemistry Laboratory I 1
  - ☐ MATH 1113 Precalculus 3
  - ☐ MATH 2250 Calculus I for Science and Engineering 4
  - ☐ PHYS 1111-1111L Introductory Physics-Mechanics, Waves, Thermodynamics 4 OR PHYS 1211-1211L 4
  - ☐ PHYS 1112-1112L Introductory Physics-Electricity and Magnetism, Optics, Modern Physics 4 OR PHYS 1212-1212L 4
  - ☐ CHEM 2212-2212D Modern Organic Chemistry II 3 AND CHEM 2212L Modern Organic Chemistry Laboratory II 1 OR MATH 2260 Calculus II for Science and Engineering 4 OR STAT 2000 Introductory Statistics 4
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### Major Required Courses (34 hours) 10 TOTAL courses (C or better required)

- ☐ BIOL 1108 AND BIOL 1108L Principles of Biology II (3) and Laboratory (1)
  - ☐ GENE 3200-3200D Genetics (4)
  - ☐ MARS 4200/6200 Biological and Chemical Oceanography 3
  - ☐ BCMB 3100 Introductory Biochemistry & Molecular Biology (4) OR BCMB 4020/6020 Biochemistry & Molecular Biology II (3)
  - ☐ CBIO 3400 Cell Biology (4) OR CBIO 3600 Developmental Biology (4) OR PBIO 3600 Plant Cell & Developmental Biology (4)
  - ☐ ECOL 3500 Ecology (3) AND 3500L Ecology lab (1) OR GENE 3000-3000D Evolutionary Biology (4) OR PBIO 3650-3650L Plant Ecology (4)
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- ☐ Organismal Biology: Choose one from the following:

BIOL(WILD) 4740 Animal Behavior 3  
CBIO(PBIO) 4600/6600 Biology of Protists 3  
ECOL 3220 Biology and Conservation of Marine Mammals 3  
ECOL 4050/6050-4050L/6050L Ichthyology 4

ECOL 4070/6070-4070L/6070L Invertebrate Biology  
& Ecology 4  
MARS 3450 Marine Biology 3

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- ☐ Laboratory: Choose one from the following:

BIOL 3110L Basic Skills in the Laboratory 4  
BIOL 4960R Faculty-Mentored Undergraduate Research I 4  
ECOL(MARS) 4225-4225L Methods in Marine Ecology 4  
MARS(PBIO) 4160-4160L Life and Death in the Salt Marsh 4

ECOL 4330/6330-4330L/6330L Tropical Marine  
Invertebrates 4  
MARS 4500/6500 Field Study in Oceanography  
& Marine Methods 3-5

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- ☐ Major Electives (6 hours)

Choose two courses from Category A OR choose one course from Category A and one course from Category B (not taken above):

### Area A:

ECOL 3220 Biology and Conservation of Marine Mammals 3  
ECOL 4330/6330-4330L/6330L Tropical Marine  
Invertebrates 4  
FISH 4300/6300 Environmental Biology of Fishes 3  
AND 4300L/6300L Laboratory 1  
MARS 3450 Marine Biology 3  
MARS 3550 Life in Fluids 3  
MARS(PBIO) 4160-4160L Life and Death in the Salt Marsh 4  
MARS(FISH) 4380/6380-4380L/6380L Marine Fisheries  
Biology 3  
MARS 4500/6500 Field Study in Oceanography &  
Marine Methods 3-5  
MARS(MIBO) 4620/6620 Microbial Ecology 3  
MARS 4810/6810 Global Biogeochemical Cycles 3

### Area B:

BIOL 3110L Applied Laboratory Research Techniques 4  
BIOL 3710L Animal Behavior Laboratory 3  
BIOL 3720L Field Animal Behavior 3  
BIOL 4960R Faculty-Mentored Undergraduate Research 4  
CBIO(PBIO) 4600/6600 Biology of Protists 3  
ECOL 3500 Ecology 3 AND 3500L Laboratory 1  
ECOL 4050/6050-4050L/6050L Ichthyology 4  
ECOL 4070/6070-4070L/6070L Invertebrate Biology 4  
GENE 3000-3000D Evolutionary Biology 4  
PBIO(GENE)(PATH)(BINF) 4510/6510 Genome Evolution  
Across the Tree of Life 3  
WILD(BIOL) 4740/6740 Animal Behavior 3