**2019-2020**

**MARINE BIOLOGY**

**LOWER-DIVISION REQUIREMENTS**

Biology BILD 1\_\_\_\_\_ BILD 2\_\_\_\_\_ BILD 3\_\_\_\_\_

Math 10A\_\_\_\_\_ 10B\_\_\_\_\_ 10C\_\_\_\_\_ (or 20A\_\_\_\_\_ 20B\_\_\_\_\_ 20C\_\_\_\_\_)

Chemistry 6A \_\_\_\_\_ 6B \_\_\_\_\_ 6C \_\_\_\_\_ 7L\_\_\_\_\_

Physics 1A \_\_\_\_\_1AL\_\_\_\_1B \_\_\_\_\_1BL\_\_\_\_ 1C\_\_\_\_\_1CL\_\_\_\_

 (or 2A\_\_\_\_\_ 2B\_\_\_\_\_ 2C\_\_\_\_\_)

SIO 90 \_\_\_\_\_

**UPPER-DIVISION REQUIREMENTS**

1. **Marine Biology Core** (all courses required)

SIO 132 \_\_\_\_\_ Introduction to Marine Biology

SIO 134 \_\_\_\_\_ Introduction to Biological Oceanography

SIO 181 \_\_\_\_\_ Marine Biochemistry (prerequisite waived for majors)

SIO 136 \_\_\_\_\_ Marine Biology Laboratory

SIO 139 \_\_\_\_\_ Current Research in Marine Biology Colloquium

1. **Biology Core Courses** (all courses required)

SIO 187 \_\_\_\_\_ Statistical Methods in Marine Biology

BICD 100 \_\_\_\_\_ Genetics

1. **Oceans, Physics and Chemistry Requirement\***

SIO 119 \_\_\_\_\_ Physics and Chemistry of the Ocean

1. **Restricted Electives** (at least 5 of the following; 2 must be indicated as Lab courses)

SIO 123 \_\_\_\_\_ Microbial Environmental Systems Biology

SIO 124 \_\_\_\_\_ Marine Natural Products
SIO 125 \_\_\_\_\_ Biomechanics of Marine Life

SIO 126 \_\_\_\_\_ Marine Microbiology

SIO 127 \_\_\_\_\_ Marine Molecular Ecology
SIO 128 \_\_\_\_\_ Microbial Life in Extreme Environments
SIO 129 \_\_\_\_\_ Marine Chemical Ecology

SIO 133 \_\_\_\_\_ Marine Mammal Biology

SIO 137 \_\_\_\_\_ Ecosystems and Fisheries

SIO 138 \_\_\_\_\_ The Coral Reef Environment

SIO 189 \_\_\_\_\_ Pollution, Environment & Health

BIBC 102 \_\_\_\_\_ Metabolic Biochemistry

BIEB 102 \_\_\_\_\_ Introduction to Ecology

BIEB 150 \_\_\_\_\_ Evolution

SIO 199 \_\_\_\_\_ Independent Study

**\*Effective Spring 2016**

**LAB ELECTIVES:**

SIO 101 \_\_\_\_\_ California Coastal Oceanography

SIO 104 \_\_\_\_\_ Paleobiology & History of Life

SIO 147 \_\_\_\_\_ Applications of Phylogenetics

SIO 183 \_\_\_\_\_ Phycology: Biology of Marine Plants

SIO 184 \_\_\_\_\_ Marine Invertebrates

SIO 185\_\_\_\_\_ Marine Microbiology Lab

SIO 188\_\_\_\_\_ Biology of Fishes Lab

BIBC 103 \_\_\_\_\_ Biochemical Techniques Lab