MARINE BIOLOGY OPTION

This option is offered within the following major(s):


The Marine Biology option is designed to give students a strong background in the biology of marine organisms and their habitats. The core biological sciences background of the Biology major is coupled with field and laboratory course work in marine biology, ecology, conservation, and oceanography. The option emphasizes research and includes experiential courses completed in residence at the OSU Hatfield Marine Science Center in Newport, Oregon. Additional research or internship experience is strongly recommended for option students, and three credits can be applied to the option electives. The Marine Biology option provides excellent preparation for graduate programs in marine biology. Students completing the Marine Biology option cannot seek the Marine Biology and Ecology minor.

Options in the Biology major require 15 or fewer additional credits (one term) beyond the basic Biology major, and most students can complete the additional Marine Biology option course work in four years. At least one term in residence at Hatfield Marine Science Center is required (spring). Courses used to satisfy the Marine Biology option also satisfy the Biology and Society, Organismal Biology, Physiology, Writing Intensive Course and the Upper-division Science Electives in the Biology major.

The Marine Biology option requires acceptance into the BI 450 *MARINE BIOLOGY AND ECOLOGY course, which is typically taken spring term of junior year at Hatfield Marine Science Center. The course covers marine invertebrates, algae and fishes, as well as sections on marine ecology, conservation and policy. Students apply to, and are accepted, the fall term before the spring they plan to attend. Applications are available in the Integrative Biology office in Cordley Hall 3029.

It is recommended that Marine Biology option students take COMM 111 *PUBLIC SPEAKING to complete the Biology major baccalaureate core communications requirement.

For further information, see MyDegrees or the Integrative Biology website at http://ib.oregonstate.edu.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BI 150</td>
<td>INTRODUCTION TO MARINE BIOLOGY (or select an additional upper-division marine elective below)</td>
<td>3</td>
</tr>
<tr>
<td>BI 347</td>
<td>*OCEANS IN PERIL</td>
<td>3</td>
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<tr>
<td>BI 450</td>
<td>*MARINE BIOLOGY AND ECOLOGY (Admission by application only - Taught at Hatfield Marine Science Center)</td>
<td>15</td>
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<tr>
<td>OC 201</td>
<td>*OCEANOGRAPHY</td>
<td>4</td>
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<tr>
<td>OC 440</td>
<td>BIOLOGICAL OCEANOGRAPHY (recommended)</td>
<td>4</td>
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<tr>
<td>or OC 434</td>
<td>ESTUARINE ECOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>or FW 434</td>
<td>ESTUARINE ECOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>Z 423</td>
<td>ENVIRONMENTAL PHYSIOLOGY</td>
<td>3</td>
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**Upper-division Electives**

Complete one of the tracks below. If you did not complete BI 150, Introduction to Marine Biology, above, select a Marine Elective Course to replace it.

**Track I Marine Elective Course**

Select one course:

- BI 302/FW 302 BIOLOGY AND CONSERVATION OF MARINE MAMMALS (Taught at Hatfield Marine Science Center. FW 301 lab is optional but recommended.)
- BI 358 SYMBOSES AND THE ENVIRONMENT
- BI 485 MONSTER BIOLOGY
- BI 421/FW 421 AQUATIC BIOLOGICAL INVASIONS (Taught at Hatfield Marine Science Center)
- BOT 416 AQUATIC BOTANY
- FW 316 SYSTEMATICS OF FISHES
- FW 331 ECOLOGY OF MARINE AND ESTUARINE BIRDS (Taught at Hatfield Marine Science Center)
- FW 464 MARINE CONSERVATION BIOLOGY
- FW 469 METHODS IN PHYSIOLOGY AND BEHAVIOR OF MARINE MEGAFUNA (Taught at Hatfield Marine Science Center)
- FW 476 FISH PHYSIOLOGY
- MB 314 AQUATIC MICROBIOLOGY (MB 422 Aquatic Microbiology Laboratory (2) is optional.)

**Track II Experiential Learning Credits**

Select any combination of 3 credits of the following:

- BI 401 RESEARCH AND SCHOLARSHIP (By approval)
- BI 406 PROJECTS: CURATORIAL ASSISTANT (By approval)
- BI 410 INTERNSHIP (By approval)

**Total Hours** 35-36

1 Complete one of the tracks. If you did not complete BI 150 INTRODUCTION TO MARINE BIOLOGY above, select a Marine Elective Course to replace it.
2 FW 301 FIELD TECHNIQUES FOR MARINE MAMMAL CONSERVATION lab is optional but recommended.
3 MB 422 AQUATIC MICROBIOLOGY LABORATORY is optional.
* Baccalaureate Core Course (BCC)
^ Writing Intensive Course (WIC)

**Option Code:** 572