

# BIOLOGY PROGRAM - Marine Biology Option Checklist

Courses used to satisfy the requirements for the Marine Biology Option may only be used to count for the two additional upper division science courses for the Biology major. Biology majors can obtain a Marine Biology Option by satisfying either Track 1 or Track 2 requirements below. BI 450/451 Marine Biology and the Hatfield Marine Science Center summer courses are taught in residence at Newport, OR.

<b>Track 1 (21 credits)</b>				
<b>Required Courses (16 credits):</b>				
✓	Course	Pre(Co)requisites <sup>1</sup>	Term <sup>2</sup>	Credits
	BI 450/451 Marine Biology @ <b>Hatfield Admission by application (see back)</b>	Junior standing BI 370	Spring	16
<b>Electives: Select a minimum of 5 credits from the following to total 21 credits.</b>				
✓	Course	Pre(Co)requisites <sup>1</sup>	Term <sup>2</sup>	Credits
	OC 331 Introduction to Oceanography <b>OR</b> OC 332 Coastal Oceanography		All Winter	3
	Z 351 Marine Ecology	One yr BI	Spring	3
	Z 352 Marine Ecology Laboratory	Z 351	Spring	2
	Z 464 Marine Conservation Biology	BI 370	Alternate Falls	3
	Hatfield Marine Science Center summer courses approved by Brock McLeod <a href="mailto:mcleodb@science.oregonstate.edu">mcleodb@science.oregonstate.edu</a> . See <a href="http://hmsc.oregonstate.edu/studentinfo.html">http://hmsc.oregonstate.edu/studentinfo.html</a> for course offerings.	Varies	Summer	Varies

<b>Track 2 (21 total credits)</b>				
<b>Required Courses (16-17 credits):</b>				
✓	Course	Pre(Co)requisites <sup>1</sup>	Term <sup>2</sup>	Credits
	BOT 416 Aquatic Botany	BI 213	Fall	4
	Z 351 Marine Ecology	One yr BI	Spring	3
	Z 352 Marine Ecology Laboratory	Z 351	Spring	2
	Z 361 Invertebrate Biology	One yr BI	Spring	3
	Z 362 Invertebrate Biology Lab		Spring	2
	<b>OR</b> Z 461 Marine and Estuarine Invertebrates @ <b>Hatfield</b>	One yr BI	Summer	4
	OC 331 Introduction to Oceanography <b>OR</b> OC 332 Coastal Oceanography		All Winter	3
<b>Electives: Select a minimum of 5 credits from the following to total 21 credits.</b>				
✓	Course	Pre(Co)requisites <sup>1</sup>	Term <sup>2</sup>	Credits
	BI 358 Symbiosis and the Environment	BI 213	Alternate Winters	3
	FW 315 Biology of Fishes	One yr BI	Fall	3
	FW 316 Systematics of Fishes	One yr BI	Fall	2
	Z 464 Marine Conservation Biology	BI 370	Alternate Falls	3
	Hatfield Marine Science Center summer courses approved by Brock McLeod <a href="mailto:mcleodb@science.oregonstate.edu">mcleodb@science.oregonstate.edu</a> . See <a href="http://hmsc.oregonstate.edu/studentinfo.html">http://hmsc.oregonstate.edu/studentinfo.html</a> for course offerings.	Varies	Summer	Varies

<sup>1</sup> Check current catalog for additional prerequisites

<sup>2</sup> Check Schedule of Classes for current course offerings

# **Marine Biology Information**

## **Careers in Marine Biology**

Bachelors in marine biology will generally prepare a student for a technician level job in many settings including non-profits, agencies, environmental consulting companies and academia. Graduate work in marine biology is important to consider for students who are serious about the career options because it provides better pay for individuals entering the field. Students interested in careers in marine biology should recognize that few marine biologists work on specific groups of organisms such as marine mammals. Marine biologists are involved in such diverse areas of research as communities and ecosystem ecology, ocean pollution and diseases, marine physiology, and the chemical composition of marine organisms. Therefore, students should sample a broad variety of areas in marine biology and general biology, particularly as undergraduates. Further information on marine biology careers can be found at the links below and <http://biology.science.oregonstate.edu/careers-biology>

The Marine Biology Option requires students to complete a regular Biology Degree and 21 credits of course work in marine biology. Consequently, students completing the option have a solid foundation for a career in marine biology, as well as many other areas of biology.

## **BI 450 / 451 Marine Biology and summer courses taught at the Hatfield Marine Science Center**

Oregon State University's 16-credit lab and field course in Marine Biology is taught during spring term at Hatfield Marine Science Center in Newport, Oregon. The course content covers marine algae, marine invertebrates, intertidal and coastal ecology, marine conservation, marine fishes, and other topics. Because of the intensity of the course and its distance from Corvallis, students taking Marine Biology live in dormitories on site at Hatfield. Marine Biology satisfies 16 of the 21 credits required for the Track I Marine Biology Option.

Admission to Marine Biology is by application each fall. Students wishing to take Marine Biology should be juniors or seniors who have taken ecology (BI 370) and other significant coursework in science. Applications for the course are available in the Biology Office (Cordley 2042). For further information contact Brock McLeod [mcleodb@science.oregonstate.edu](mailto:mcleodb@science.oregonstate.edu).

The Hatfield Marine Science Center also offers summer courses in marine sciences. These courses can be viewed at <http://hmsc.oregonstate.edu/studentinfo.html>.

## **Marine Biology Research and Internships**

Marine biology students can participate in marine biology research conducted in many areas of OSU. The best way to get involved in research is to approach a faculty member you would like to work with. Faculty research interests can be found on most department websites. Students should also look on the internet for opportunities to do research at other institutions, particularly during the summer. Additional information about research and internship opportunities can be found by looking at the websites below:

- OSU Research Opportunities <http://biology.science.oregonstate.edu/undergraduate-research>
- See the Marine Biology / Oceanography section of the Local and National Internship, Research, Volunteer, and Job Opportunities at <http://biology.science.oregonstate.edu/research-internships-volunteering-and-jobs>
- OSU International Internships (IE3) <http://ie3global.oregonstate.edu/index.html>

## **Additional Marine Biology Information**

- Hatfield Marine Science Center <http://hmsc.oregonstate.edu/index.html>
- Oregon Coast Aquarium <http://www.aquarium.org/>
- Mote Marine Laboratory Marine Career Info. <http://www.marinelab.sarasota.fl.us/careers.phtml>
- Scripps Institute Marine Career Information <http://ocean.peterbrueggeman.com/career.html>
- Sea Grant marine careers information <http://www.marinecareers.net/index.php>
- Marine Biology Information <http://life.bio.sunysb.edu/marinebio/mbweb.html>
- Hopkins Marine Station Career Info. <http://hopkins.stanford.edu/careers.htm>
- Search for marine Biology experts at <http://expertise.cos.com/cgi-bin/searchexp>