The university's marine biology station at Charleston is an ideal location for the study of marine systems. Many habitats are within easy reach of the laboratory. To the north are over 40 miles of sandy beaches, and to the south are extensive rocky shores. The laboratory is at the entrance to Coos Bay, and estuarine and open ocean habitats are only minutes away. OIMB is adjacent to the South Slough National Estuarine Research Reserve. Fall term courses take advantage of these opportunities. Classes are small, meet all day, and have a maximum of 24 students. They are designed for juniors and seniors majoring in marine biology, biology, general science, and environmental science. Field trips and lab activities are emphasized. The courses fulfill requirements for UO undergraduates. All students must have completed either BI 211 - 213 or BI 251 – 253 or an equivalent core sequence in biology. UO students register using DuckWeb, non-UO students can use a guest registration found on the web page.

**BI 457/557 Marine Biology: Marine Environmental Issues** (5 quarter hour credits) Issues that influence biological diversity of marine environments are approached from a global scale, and from real world examples from the local environment. We will examine several local applied conservation case studies with guest speakers and field trips. We will take an integrated approach to explore global climate change, conservation, fisheries, habitat alteration, introduced species, and pollution in the marine environment using readings, seminars, and peer-reviewed writing. Meets Mondays 8:30am-5:00pm. Instructor: Aaron Galloway

**BI 457/557 Phytoplankton Ecology** (5 quarter hour credits) At least half the primary production on Earth is done by the drifting primary producers of the ocean. We will look at the extraordinary taxonomic diversity of phytoplankton, the role of both benthic and planktonic representatives of major taxa like diatoms and dinoflagellates in estuarine and coastal ecosystems, and investigate key social and environmental problems involving phytoplankton like harmful algal blooms, coastal eutrophication/hypoxia, and impact of climate change on phytoplankton-based food webs. Includes field trips to seagrass beds, mudflats, and coastal waters. Meets on Tuesdays 8:30 – 5:00. Instructor: Michelle Wood

**BI 457/557 Marine Biology: Molecular Marine Biology** (4 quarter hour credits) An introduction to applying molecular biology to research using marine organisms. Lectures and readings examine the use of molecular data in taxonomy and systematics, population structure and conservation biology, and morphological and developmental evolution. Lab exercises include analysis and interpretation of existing data sets and the generation of new data using basic methods. Students acquire practical laboratory skills including collection and preservation of material for molecular work, DNA extraction, PCR amplification of suitable target genes, sequence analysis, and building and interpreting phylogenetic trees. Meets Wednesdays 8:30am-3:30. Instructor: Michelle Wood

**BI 458/558 Biological Oceanography** (5 quarter hour credits) Examines the patterns of biological productivity and controlling physical and chemical mechanisms in the various environments of the world’s oceans. Meets on Thursdays 8:30 – 5:00 Instructor: Alan Shanks

**BI 214 General Biology IV: Mechanisms** (4 quarter hour credits) Mechanisms starts with the alphabet of life and the genetic code. We proceed to describe how the code is interpreted to yield functional macromolecules, and explore how regulated gene expression enables a dynamic phenotype to emerge upon the basis of a static genotype. Putting these together, we conclude with simple physiological machines that execute the equivalent of computational tasks to guide the behavior of living cells. Meets Fridays 8:30 – 3:30. Instructor: George von Dassow

**BI 407/507 Seminar: Marine Biology** (2 quarter hour credits) Speakers from a number of different universities present their research interests. Meets on Fridays at 4:00 pm

**OIMB INFORMATION**

Tuition and fees are the same as those on main campus. Housing at OIMB is available. To apply, return the application form on the reverse of this announcement. If you have questions please contact OIMB at oimb@uoregon.edu or 541-346-7280.
OREGON INSTITUTE OF MARINE BIOLOGY FALL TERM 2021
SCHEDULE OF CLASSES

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Class hours are 8:30 AM - 5 PM, Monday-Friday with arranged field trips.

APPLICATION

Return completed application to Tammy Trost, Oregon Institute of Marine Biology, PO Box 5389, Charleston, OR 97420 or email to ttrost@uoregon.edu with “2021 Fall Application” in the subject. Applications are reviewed on a rolling basis until courses are full. UO students can register using DuckWeb.

NAME_________________________________________________________

MAJOR________________________________ Graduate/Undergraduate (circle appropriate) YEAR in school: Soph/Jun/Sen

AGE_______UO Student Number____________________________ Telephone_________________________

Home Address______________________________________________________________

School Address________________________________________________________________

E-mail Address_______________________________________________________________

Do you want to apply for OIMB housing?   Yes / No   If Yes: Female / Male / UO Grad Student

Housing may include a meal plan through our dining hall. Do you have any dietary restrictions and/or food allergies our cooks should be aware of? _____________________________________________

***Fall term often does not have an open kitchen due to lower enrollment, in which case students will be housed in dorms or cottages with kitchens.

Information and application forms for OIMB Scholarships: http://oimb.uoregon.edu/academics/scholarships/

IF YOU ARE NOT A UNIVERSITY OF OREGON STUDENT: Please complete the guest student application page, available on the web, and send copies of your transcript with this application. We will notify you of your acceptance within two weeks of receiving your application.

Please check below the courses you wish to take at OIMB. The recommended course load is 16-17 credits.

BI 457/557 Marine Biology: Marine Environmental Issues (5 credits)_______
BI 457/557 Phytoplankton Ecology (5 credits)________
BI 457/557 Marine Biology: Molecular Marine Biology (4 credits)________
BI 458/558 Biological Oceanography (5 credits) ________
BI 214 General Biology IV: Mechanisms (4 credits) ________
BI 407/507 Seminar: Marine Biology (2 credits)________