

2022 FALL TERM OREGON INSTITUTE OF MARINE BIOLOGY

September 27 - December 9, 2022

oimb.uoregon.edu

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. OIMB scholarship information is on the OIMB website.

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 Mondays 8:30 - 5:00. Instructor: TBA.

BI 454/554 Estuarine Biology (5 quarter hour credits) The biological and physical factors regulating production, abundance, distribution and diversity in estuaries. Includes field trips to marshes, tide flats, eelgrass beds and open waters. Meets Tuesdays 8:30 - 5:00. Instructor: Richard Emlet.

BI 457/557 Marine Biology: Molecular Marine Biology (5 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. *Fulfills Area 1 major requirement.* Meets Wednesdays 8:30am-5:00pm. Instructor: Svetlana Maslakova

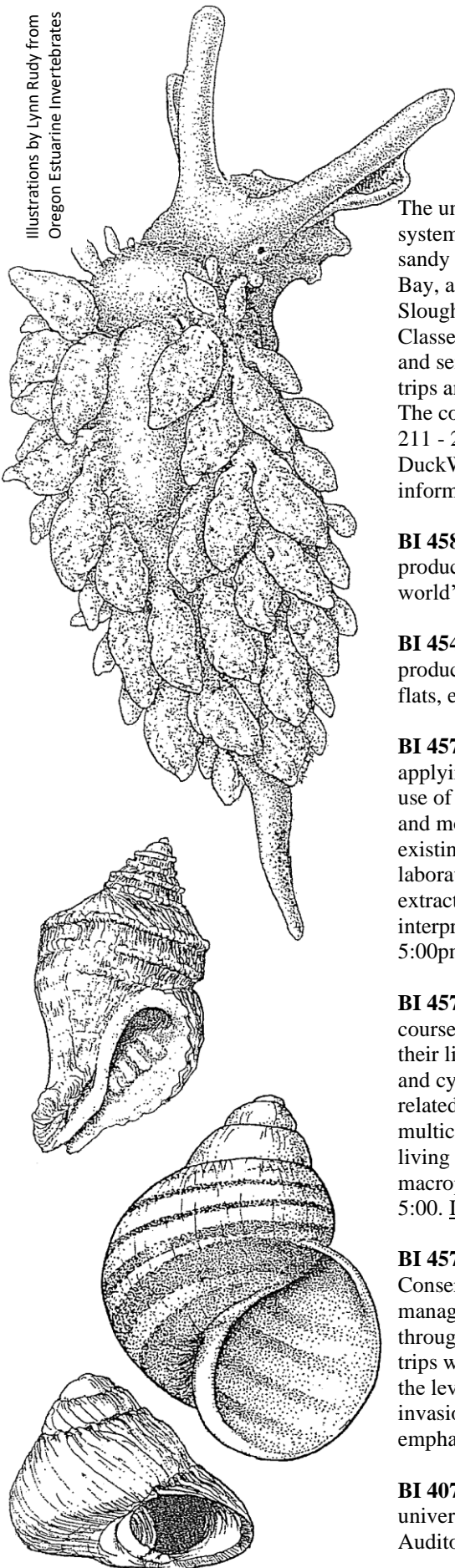
BI 457/557 Marine Biology: Cell Physiology in the Marine Realm (5 quarter hour credits) This course covers fundamental topics in cell biology, with a focus on marine organisms in relation to their lifestyle in the natural environment. Specific topics will include cell division (mitosis, meiosis, and cytokinesis) and the cell cycle, organization and dynamics of the cytoskeleton, cell motility and related behaviors in protists and animal cells, intracellular transport, cell shape change, and multicellularity in animals and various algal groups. Labs focus on practical light microscopy on living material, including invertebrate eggs and embryos, diatoms and other algae and protists, macrophytes, and even whole animals. *Fulfills Area 1 major requirement.* Meets Thursdays 8:30 - 5:00. Instructor: George von Dassow

BI 457/557 Marine Biology: Marine Conservation Biology (5 quarter hour credits) Marine Conservation Biology is the applied science behind the maintenance of biodiversity and the management of marine resources. We will examine prevailing dogma from diverse user groups through close examination of applied conservation case studies. Using readings, seminars, and field trips we will think critically and communicate effectively about the consequences of diversity loss at the levels of 'stocks' species, ecosystems, and genetics. We will assess threats to biodiversity (e.g. invasions, diseases, fishing, mineral extraction), and mechanisms for dealing with these risks, with an emphasis on marine reserves. Meets Mondays 8:30am-5:00pm. Instructor: TBA

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 in the OIMB Boathouse Auditorium.

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 541-888-2581.



**OREGON INSTITUTE OF MARINE BIOLOGY FALL TERM 2022
SCHEDULE OF CLASSES**

MONDAY

BI 458/558

Biological
Oceanography

TUESDAY

BI 454/554

Estuarine Biology

WEDNESDAY

BI 457/557

Molecular
Marine Biology

THURSDAY

BI 457/557

Cell Physiology

FRIDAY

BI 457/557

Marine Conservation
(8:30 – 3:30)
Seminar (4-5pm)

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 "2022 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 458/558 Biological Oceanography (5 credits) _____

BI 454/554 Estuarine Biology (5 credits) _____

BI 457/557 Marine Biology: Molecular Marine Biology (5 credits) _____

BI 457/557 Marine Biology: Cell Physiology (5 credits) _____

BI 457/557 Marine Biology: Marine Conservation (5 credits) _____

BI 407/507 Seminar: Marine Biology (2 credits) _____