WINTER QUARTER
January 3 – March 13, 2021, applications due December 1
- Imaging Biology: Techniques, Technology & Tools (FHL 470, 15 credits) Dr. Adam Summers

SPRING QUARTER
March 29 - June 4, 2021, applications due December 15
THE ZOO-BOT PROGRAM
Students earn 9 standard courses plus optional Marine Sciences Seminar, 16 or 17 total credits:
- Marine Zoology (FHL 430/BIOL 430, 5 credits) Dr. Megan Dethier
- Marine Botany (FHL 448/BIOL 448, 5 credits) Dr. Thomas Mumford
- Research “Biological Response to Changing Ocean Conditions” (FHL/MARBIO 470, 6 credits) Dr. Terrie Klinger

SPRING MARINE STUDIES
Students select courses, minimum 25 credits:
- Introductory Biology (BIOL 180, 5 credits) Dr. Jaquan Horton
- Integrative Oceans – (online) (OCEAN 210, 4 credits) Dr. Curtis Deutsch
- Natural History of the Salish Sea (FHL 275, 5 credits) Dr. Emily Carrington
- Science Writing for Diverse Audiences (FHL 333, 3 or 5 credits) Dr. Holly Shelton
- Marine Mammals of the Salish Sea (FHL 375, 5 credits) Dr. Deborah Giles
- Marine Sciences Seminar (FHL 440, 1 credit) TBD

SHORT COURSES/WORKSHOPS
Evolutionary Quantitative Genetics
June TBD, 2021 (5-day workshop) Dr. Joseph Felsenstein & Dr. Steven Arnold

SUMMER QUARTER
June 14 – August 8, 2021, applications due February 1
- Marine Invertebrate Zoology (FHL/BIOL 432, 9 credits) Dr. Megan Schwartz & Dr. Johanna Cannon
- Marine Botany: Diversity & Ecology (FHL 446, 9 credits) Dr. Thomas Mumford & Dr. D. Wilson Freshwater
- Comparative Invertebrate Embryology (FHL/BIOL 536, 9 credits) Dr. Andreas Heyland & Dr. Billie Swalla
- Marine Animal Bioacoustics (FHL 585, 9 credits) Dr. Joseph Stanescu, Dr. Timothy Tricas & Dr. Lane Seeley

SUMMER RESEARCH INTERNSHIPS
June 14 – August 8, 2021, applications due February 1
Paid internships targeted to undergraduates, Funded by NSF REU and the Blinks Endowment

SUMMER SESSION A
June 14 – July 16, 2021, applications due March 1
- Marine Invertebrate Zoology (FHL/BIOL 432, 9 credits) Dr. Megan Schwartz & Dr. Johanna Cannon
- Marine Botany: Diversity & Ecology (FHL 446, 9 credits) Dr. Thomas Mumford & Dr. D. Wilson Freshwater
- Comparative Invertebrate Embryology (FHL/BIOL 536, 9 credits) Dr. Andreas Heyland & Dr. Billie Swalla
- Marine Animal Bioacoustics (FHL 585, 9 credits) Dr. Joseph Stanescu, Dr. Timothy Tricas & Dr. Lane Seeley

SUMMER SESSION B
July 19 – August 20, 2021, applications due March 1
- Ecology & Conservation of Marine Birds & Mammals (FHL/FISH 492, 9 credits) W. Brock Tyler & Dr. Eric M. Anderson
- Fish Swimming (FHL 528, 9 credits) Dr. Paolo Domenici, Dr. John F. Steffensen & Dr. Jacob Johansen
- Marine Subtidal Ecology (FHL 468, 9 credits) Dr. Kate Dobilowski, Timothy Dwyer & Pema Klaft
- From Behavior to Robotics: Reverse Engineering the Octopus (FHL 585, 9 credits) Dr. David Gre, Dr. Venkatesh Gopal & Dominik Sinklli

EARLY FALL START
Marine Biology in the Field September 2021 TBD, applications due March 1
(MARBIO 488, 6 credits) Dr. Jose Guzman

AUTUMN QUARTER
September 29 – December 10, 2021, applications due TBD
- PELAGIC ECOSYSTEM FUNCTION
  RESEARCH APPRENTICESHIP, (OCEAN 492, 15 credits) Dr. Jan Newton, Dr. Matthew Baker & Dr. Rebecca Guenther

http://depts.washington.edu/fhl/
Courses and Research Apprenticeships

FHL offers educational opportunities for students in spring, summer and autumn. Students earn credits through the University of Washington but do not need to be currently enrolled at UW to apply. Courses and apprenticeships are taught by UW faculty as well as faculty from other universities and research institutions worldwide.

The instructional program in summer is intended for graduate and advanced undergraduate students. Well-qualified undergraduates may be admitted to graduate-level courses with the consent of the director and the faculty of the course. Summer courses (9 weeks) may be taken sequentially but not concurrently.

Courses in spring and autumn quarters (10 weeks) are targeted to undergraduates and post-baccalaureates. Research apprenticeships are intensive, full-time research training experiences offered to qualified undergraduates and post-baccalaureates in spring and autumn. Small groups work on focused research guided by faculty and graduate student mentors. Students report that these experiences make them more likely to choose a scientific research as a career option.

Scientific Facilities

Laboratories and Equipment: The teaching and research laboratories consist of thirteen buildings containing sea water. Walk-in-cold rooms, a microscope room, a large flume and a workshop are available. Analytical equipment includes spectrophotometers, computer-based data handling and analysis systems, and high-precision balances. Other equipment for molecular biology, spectrophotometers, culture chambers, fluorescence microscopes, video equipment, scanning laser confocal microscopes and electrophysiological equipment. A scanning electron microscope, transmission electron microscope and CT scanner may be used by investigators with appropriate training. An analytical chemistry laboratory and tide mills in outdoor tanks are also available.

Stockrooms: The FHL stockroom loans small research equipment, labware and photographic equipment to students and investigators and provides consumable lab provisions and reagents at cost. Persons needing unusual materials, large quantities, radioscopy or special equipment should make arrangements in advance.

Facilities for Scuba Diving & Boating: Scientific divers certified by the UW or other AUSA licenses may rent FHL’s four boats and a limited number of tanks and weights for specific projects approved by the Diving Officer. Study site information as well as check-out dives are provided by the Dive Officer.

Library: The FHL Library provides a collection of books, journals and electronic resources with a focus on the marine sciences. Areas of emphasis include developmental biology, cellular biology, oceanography, fish biology, marine botany and marine ecology. Access to the UW Libraries catalog, article indexes and electronic journals is available through the Library Web page.

Marine Equipment: A research vessel equipped for dredging, trawling, netting, hauling and water sampling is available for classwork and research. Rowboats and outboard powered boats are also available.

Synoptic Collection: A collection of preserved marine animals and plants is available to qualified students. In addition, files of collecting, study-site surveys and color transparencies of local marine life and habitats are maintained for reference.

Importation of Species: Most imports of marine species into Washington State for research are illegal without a permit from the Washington State Department of Fish and Wildlife. Permits, when granted, will require strict quarantine of non-native organisms with no contact with the FHL seawater system.

Vertebrate Research: Persons intending to work with fish or cephalopods at FHL must do so under a protocol approved in advance by the University of Washington Animal Welfare Office.