

# Marine Option Program

The Marine Option Program (MOP) is designed to assist undergraduate and other students interested in marine and freshwater systems. Through MOP, you can obtain a marine orientation to your own major while earning an official University of Hawai'i certificate, which is registered on your transcript. MOP emphasizes experiential, cross-disciplinary education, and provides opportunities to apply your traditional coursework to the real world while you obtain practical marine skills through a hands-on internship, research project, or employment.

An Academic Subject Certificate (ASC) is awarded to students who successfully complete at least 10 credit hours of marine-related courses:

- OCN 101 – one (1) credit
- OCN 201 or ZOOL 200 – three (3) credits
- Marine electives – six (6) credits
- MOP skill project – Academic Independent Study 199 or SCI 295V – two (2) or more credits

The unique MOP skill project allows students to design and conduct an independent aquatic project related to their academic field of interest or educational goals. At Windward CC, MOP is managed by the Pacific Center for Environmental Studies (PaCES).

For information about the program, contact the Windward CC MOP coordinator at 808-235-9118, email [wccmop@hawaii.edu](mailto:wccmop@hawaii.edu), or visit the website: <https://windward.hawaii.edu/marine-option-program/>.

**Type:** Academic Subject Certificate

## Marine Option Program Overview (1 credit required)

Item #	Title	Credits
OCN 101	Introduction to the Marine Option Program	1

## Ocean Survey Class (3 credits required)

Item #	Title	Credits
OCN 201	Science of the Sea	3
ZOOL 200	Marine Biology	3

## Electives (6 credits required)

Item #	Title	Credits
AG 170	Introduction to Aquaponics	4
AQUA 106	Small Scale Aquaculture	3
AQUA 106L	Small Scale Aquaculture Laboratory	1
AQUA 201	The Hawai'i Fishpond	3
AQUA 201L	The Hawai'i Fishpond Lab	1
ANTH 175	Polynesian Surf Culture	3
ANTH 175L	Surf Culture Field Lab	1
ATMO 101	Introduction to Weather and Climate	3
BIOL 101	Biology and Society	4
BIOL 124	Environment and Ecology	3
BIOL 124L	Environment and Ecology Lab	1
BIOL 172	Introduction to Biology II	3
BIOL 172L	Introduction to Biology II Lab	1
BIOL 200	Coral Reefs	3
BIOL 200L	Coral Reef Laboratory and Field Studies	1
BIOL 265	Ecology and Evolutionary Biology	3
BIOL 265L	Ecology and Evolutionary Biology Lab	1
BOT 101	General Botany	3
BOT 130	Plants in the Hawaiian Environment	3
BOT 130L	Plants in the Hawaiian Environment Lab	1
GEO 101	The Natural Environment	3
GEO 101L	The Natural Environment Laboratory	1
ERTH 101	Dynamic Earth	3
ERTH 101L	Dynamic Earth Laboratory	1
ERTH 103	Geology of the Hawaiian Islands	3
ERTH 210	O'ahu Field Geology	1
ERTH 211	Big Island Field Geology	1
ERTH 212	Maui Field Geology	1
ERTH 213	Moloka'i, Lana'i, and Kaho'olawe Field Geology	1
ERTH 214	Kaua'i and Ni'ihau Field Geology	1
HIST 285	Environmental History of Hawai'i	3
HWST 107	Hawai'i: Center of the Pacific	3
IS 201	The Ahupua'a	3
OCN 102	Introduction to the Environment and Sustainability	3
OCN 120	Global Environmental Challenges	3
OCN 201	Science of the Sea	3
OCN 201L	Science of the Sea Lab	1
OCN 260	Pacific Surf Science and Technology	3
OCN 260L	O'ahu Surf Science and Technology Lab	1
PACS 108	Pacific Worlds: an Introduction to Pacific Islands Studies	3
ZOOL 105	Hawaiian Use of Fish and Aquatic Invertebrates	3
ZOOL 200	Marine Biology	3
ZOOL 200L	Marine Biology Lab	1

# Final MOP Skill Project (minimum 2 credits as Independent Study or SCI 295V)

MOP's philosophy is that with only classroom and laboratory learning, you leave College incompletely educated about the ocean. Therefore, first-hand experience is central to the Certificate requirements. The MOP seminar (OCN 101, Introduction to the Marine Option Program) is designed to help you choose a topic and develop a written plan or proposal for your project. By enrolling for credit while carrying out the project, it becomes part of your academic record.

The MOP staff will help you survey potential topics, identify an appropriate mentor, prepare your proposal and carry out your project in a timely fashion. You can come into the MOP office with an idea, or you can find a ready-made opportunity by reading Seawords, the MOP newsletter, or by scanning the bulletin board in your campus MOP office. Not all projects fit the academic calendar - this can be accommodated. You may undertake a project alone or with one or more MOP students. The projects can be based on or off campus. Often MOP can provide supplies, equipment or funds to assist with your project. Topics can range from fisheries, marine biology, marine art, and journalism, maritime archaeology, marine education, to marketing surveys for an ecotourism firm. Keep in touch with your MOP Coordinator during the project by submitting periodic progress reports.

Projects are concluded by a final report which may be written, an oral presentation at the annual MOP Student Symposium, a performance, an art show, etc. MOP Coordinators assist students in selecting an appropriate format for the final report and guide students in evaluating their learning.

## Restrictions

- No more than six credits may be “double counted” between the MOP Certificate and another UH Certificate or degree.
- No more than six credits may be from a non-UH institution.
- The identical project and project report may not satisfy both the MOP Certificate requirement and the requirement for another Certificate or degree.
- The MOP project can be a section or phase of a larger project, for instance, which constitutes a senior thesis, or vice versa.
- This relationship should be clearly stated in the project proposal.