

Minor Title

Minor in Marine Biology

Offered to students
admitted to Year 1 in**2012****Objectives:**

The field of marine biology has become increasingly popular as interest in and awareness of our marine environment grows. Hong Kong already has strong cultural and historical links with the sea as well as a strong economic and societal interest in natural marine resources. The course aims to introduce students to the field of marine biology from species, habitat and ecosystem levels, ranging from the deep ocean to intertidal environments, and from both theoretical and practical perspectives. Material will be global and include organisms and their physical, behavioral and physiological adaptations to the marine environment, as well as techniques for marine study. Major marine issues will be covered including benefits derived from the marine environment and possible implications of climate change for marine systems. Particularly relevant examples from Hong Kong and the Southeast Asia region will be highlighted. This minor will provide students from diverse backgrounds (e.g. business, engineering and social science) an excellent opportunity to enter into a career or research in marine environment-related fields such as coastal ecosystem management, fisheries, marine environmental protection, marine resource management, etc.

Learning Outcomes:

Students should be able to:

- a. have a general appreciation of the requirements and constraints to life in different marine environments;
(by means of coursework, laboratory-based, and tutorial classes and project-based learning in the curriculum)
- b. have a comprehensive foundation for pursuing marine-orientated studies;
(by means of coursework, laboratory-based, and tutorial classes and project-based learning in the curriculum)
- c. have a general insight into an ecosystem that covers two-thirds of the planet and supports the only remaining natural resource harvested on a large scale;
(by means of coursework, laboratory-based, and tutorial classes and project-based learning in the curriculum)
- d. have an understanding of the major marine issues both locally and globally;
(by means of coursework, laboratory-based, and tutorial classes and project-based learning in the curriculum)
- e. have an appreciation of the possible implications of climate change on marine systems;
(by means of coursework, laboratory-based, and tutorial class and project-based learning in the curriculum)
- f. have inspiration to pursue further studies in the environmental sciences.
(by means of coursework, laboratory-based, and tutorial class and project-based learning in the curriculum)

Impermissible Combination:

NIL

Required courses (36 credits)**1. Introductory level courses (12 credits)**

At least 12 credits selected from the following courses:

- BIOL1309 Ecology and evolution (6)
- ENVS1301 Environmental life science (6)
- BIOL2304 Evolutionary diversity (6)

2. Advanced level courses (24 credits)

- BIOL3301 Marine biology (6)
- ENVS3313 Environmental oceanography (6)

Plus at least 12 credits selected from the following courses:

- BIOL3304 Fish biology (6)
- BIOL3309 Conservation ecology (6)
- BIOL3318 Experimental intertidal ecology (6)
- BIOL3320 The biology of marine mammals (6)
- BIOL4301 Fisheries and mariculture (6)

Notes:

1. A course may appear as required course in two or more Science majors/minors. Each course can only be considered to satisfy the requirement of one major or one minor, even if that appears in the curriculum of two majors/minors. Students have to select another course to replace the course in the second major/minor.

2. Courses at the advanced level are subject to change.

Remarks:

Important! Ultimate responsibility rests with students to ensure that the required pre-requisites and co-requisite of selected courses are fulfilled. Students must take and pass all required courses in the selected primary science major in order to satisfy the degree graduation requirements.