

Suggested 4 week itineraries for marine biology expeditions



There are two locations where you can take expeditions that cover marine biological subjects, The Cayos Cochinos and Utila in **Honduras**, Central America and Hoga island in **Indonesia**.

Indonesia - Wakatobi National Park

Itinerary

Week 1 - IH007 Indonesian reef ecology

Week 2,3 - IH110-113 Marine research options on Hoga island

Week 4 - IK114 Fisheries monitoring

A course covering elements of the marine environment based on the coral reefs and marine environment around the small Indonesian island of Hoga, situated in the Wakatobi National Park, in the centre of the Coral Triangle – the most biodiverse areas of coral reefs in the world. The course will allow the student to develop an understanding of Indo-Pacific reef species and their biology and ecology as well as the methods used in their research and how this research will be used towards conservation.

The first week of the course involves the reef ecology course where students will learn species identification of fish, corals and invertebrates. The course also involves elements of reef conservation, surveying and ecology.

There are then 4 week long options, detailed below, from which the student can choose from to build their own itinerary for the remaining three weeks.

Option 1 - IH110 Biotope Mapping

Much of the marine environment in the Wakatobi remains unstudied, the biotope mapping program allows students to take part in large scale mapping of the marine environment classifying habitats based on the presence and abundance of a few key species that the students will study in detail. The aim of this study is to cover as large area of the park as possible to increase the knowledge of what habitats are present, along with their extent and locations.

Option 2 - IH111 Coral Reef Monitoring

Operation Wallacea has been monitoring the reefs within the Wakatobi for over a decade, conducting yearly surveys of the populations of fish, invertebrates and coral species. Students will join teams with experts in reef species identification and contribute towards this yearly assessment program by assessing reef species abundances and populations. This will require the student to develop a comprehensive understanding of reef species biology. The monitoring program is more focused than the biotope mapping allowing more detailed species information to be taken but covers a smaller area. The student will also learn how such data is vital within the context of conservation and running of a marine park.

Option 3 - IH112 Research Assistant Pool

There are many projects running at the Hoga research station at any one time run by a variety of academics with specialist interests. The research assistant pool allows the student to join any of these projects and help collect data on a wide range of different species and habitats. Many of these projects are very focussed and will allow the student to develop a detailed understanding of one element of the research being done on site. Such projects are run of the reefs but also on seagrass and mangrove systems and the student can join any such project that takes their interest.

Option 4 - IK114 Fisheries monitoring within the Wakatobi National Park

Students will stay on the larger island of Kaledupa adjacent to Hoga and live with one of the fishing communities, usually staying in the homes of the local people. During the week there the students will help with monitoring of the fish catches made by various artisanal techniques and will develop an understanding of traditional fishing practices and the effects this has on the local reefs.

Suggested 4 week itineraries for marine biology expeditions



Honduras - The Cayos Cochinos Islands

Itinerary

Week 1 - HC005 Cayos Reef Ecology

Weeks 2,3 - HB105 Reef surveying on Cayos

Week 4 - HB107 Research assistant pool on Cayos

A course covering elements of the aquatic marine environment based on the coral reefs and associated habitats around the small Honduran Cayos Cochinos Islands within the Cayos Cochinos Marine Protected Area (CCMPA). The course will allow the student to develop an understanding of Caribbean reef species and their biology and ecology as well as the methods used in their research. The student will also learn about the interactions between organisms and their environment and what pressures are placed on such systems. Finally the student will contribute data to monitoring programs and discover how this research is being used towards conservation.

The first week involves the reef ecology course where students will learn fish, coral and invertebrate identification while covering elements of reef conservation, surveying and ecology.

The second and third week require the student to join the reef surveying program where they will be involved in assessing the health of the reefs by surveying the fish, coral, invertebrate populations on the reef in contrast to the benthic structure and algal coverage. The student will learn surveying methods and help with the processing of the data collected.

There are many projects running on the Cayos Cochinos at any one time run by a variety of academics with specialist interests. The research assistant pool allows the student to join any of these projects for their final week and help collect data on a wide range of different species and habitats. Many of these projects are very focussed and will allow the student to develop a detailed understanding of one element of the research being done on site. Such projects are run on the reefs but also on seagrass systems and the student can join any such projects that takes their interest.

Honduras - Utila

Itinerary

Week 1 - HU007 Utila Reef Ecology

Week 2 - HU012 Advanced Marine Survey Methods

Week 3 - HB105 Reef surveying on Utila

Week 4 - HB107 Research assistant pool on Utila

A course covering elements of the marine environment based on the coral reefs and marine environment around the small Honduran island of Utila. The course will allow the student to develop an understanding of Caribbean reef species and their biology and ecology as well as the methods used in their research and how this research will be used towards conservation. It also includes a speciality on marine surveying methods allowing the student to develop a range of skills in marine survey techniques.

The first week involves the reef ecology course where students will learn fish, coral and invertebrate identification while covering elements of reef conservation, surveying and ecology.

Following on from this students will join the advanced marine survey methods course where they will learn variety of skills and techniques used by marine biologists to survey the marine environment. This includes techniques for surveying reefs, seagrass and mangrove beds using diving, snorkelling and other methods.

The third week will require the student to join the reef surveying program where they will be involved in assessing the health of the reefs by surveying the fish, coral, invertebrate populations on the reef in contrast to the benthic structure and algal coverage.

There are many projects running on the Cayos Cochinos at any one time run by a variety of academics with specialist interests. The research assistant pool allows the student to join any of these projects for their final week and help collect data on a wide range of different species and habitats. Many of these projects are very focussed and will allow the student to develop a detailed understanding of one element of the research being done on site. Such projects are run on the reefs but also on seagrass and mangrove systems and the student can join any such project that takes their interest.