

# **ECL 0396 MARINE ECOLOGY**

## **COURSE PRE-REQUISITES**

- Techniques of Marine Research 1 (module 1)
- or one Biology or one Ecology course

## **COURSE DESCRIPTION**

Students will learn about the properties of marine communities and about the processes that affect the abundance and distribution of marine organisms. Students will be introduced to the most important topics in marine ecology, such as larval supply, succession, disturbance, trophic cascades, facilitation and biodiversity and ecosystem functioning. In addition we will discuss the influence of upwelling and climate change on marine communities. We will also review the ecology of the main marine habitats present in the Galápagos, such as seamounts and hydrothermal vents, rocky shores, rocky subtidal communities, coral reefs and mangals.

This class has a strong field component to see in situ how different processes affect the structure and function of marine communities. During the first week, we will visit three field sites, where we will identify the key players of our communities and get inspired for undertaking independent research projects. In addition, we will snorkel/scuba at two other sites to get exposed to other marine habitats such as coral patches and vertical walls.

## **COURSE OBJECTIVES**

- Gain a broad understanding of the relevant processes and properties of marine communities with particular emphasis on the Galápagos Islands.
- Empower students to a) do science and think independently over a short period of time based on original observations in nature, b) be synthesizers and critical thinkers and c) effectively convey their scientific thoughts and analyses in writing and oral presentations.