

Marine Ecology

This course is designed to have students experience the world's oceans first hand. Class participants will be able to explore the many facets of St. John Island, of the US Virgin Islands. St. John Island is the home of the Virgin Island National Park and the Coral Reef National Monument.

Instructional Objectives:

- A) Understanding of marine ecology:
- 1.) Describe the marine environment on and surrounding St. John Island.
 - 2.) Observe representative organisms of Echinodermata, Cnidaria, Porifera, and reef fish.
 - 3.) Explain the significance of sand productions in the reef community.
 - 4.) Identify hazardous marine animals, and plant species.
 - 5.) Compare and contrast the windward and leeward sides of an island.
 - 6.) Identify the ecological roles of marine organisms.
- B) Observation Skills:
- 1.) Compare tidal pool ecosystems with reef ecosystems.
 - 2.) Identify commonly seen corals.
 - 3.) Identify commonly seen fish in the reef community.
- C) Ocean Aesthetics:
- 1.) Describe appealing activities from our trip and support reasons for their appeal.
 - 2.) Take pleasing photographs that show the earth's natural environment.
 - 3.) Show examples of activities that can be done involving the oceans.
- D) Physical features:
- 1.) Compare beaches, intertidal zones and shallow reef areas.
 - 2.) Explain the difference between oceanic and inland blue holes
 - 3.) Compare and contrast the different depths of the ocean with the environmental conditions present.
- E) Safety:
- 1.) Use the buddy system when diving or snorkeling
 - 2.) Make sound diving decisions
 - 3.) Describe safety procedures if your buddy has a "problem"
- F) Island Environment:
- 1.) Describe plant species on the island and their adaptations to the climate.
 - 2.) Describe agricultural problems with St. John Island.
 - 3.) List St. John Island's major resources
 - 4.) Describe the topography of St. John Island.

