Seacamp Association, Inc.

Marine Science

Parent Camper Information Packet

2025 Session Dates

Two week sessions

1st Session

June 25-July 9

2nd Session

July 12-July 26

One week sessions

3rd Session

July 29 - August 3

4th Session

August 4 - August 9

Inside this Section:

Marine Science Overview

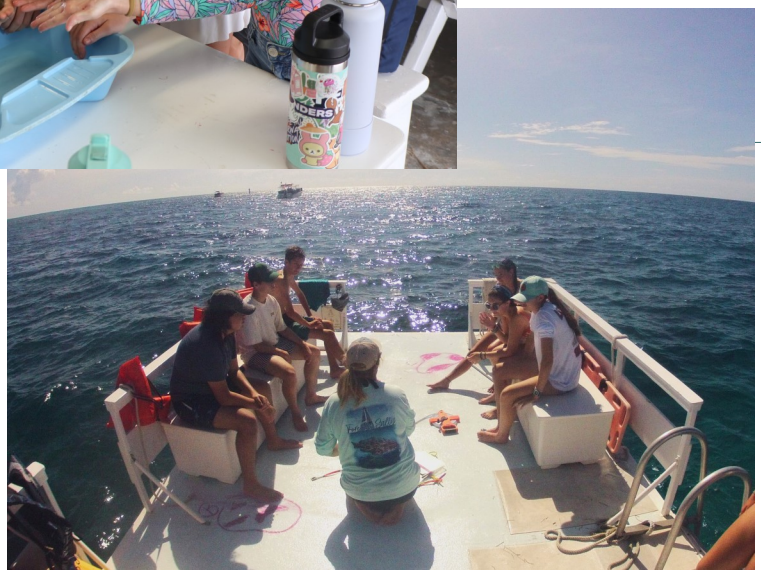
Seacamp offers numerous Marine Science courses with an emphasis on experiential learning, and most campers have the opportunity to participate in at least two Marine Science courses (in addition to other activities). These Marine Science courses are snorkeling-based, and learning is enhanced through boat trips, kayaking, and lab activities.

Our goal is to have returning campers to experience a variety of different courses. Science courses typically transition from broad categories to more specific as campers age.

The requirements for all courses are that a camper must demonstrate good swimming abilities through a swim evaluation and have their own mask, fins, and snorkel.

Campers will be sent a **Course Preference Form** closer to the start of camp. Requests will be considered when creating the schedule.

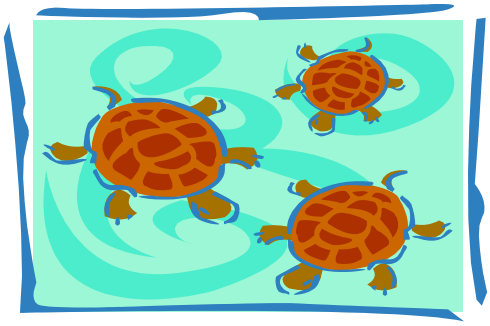
If necessary, Seacamp may cancel, change or substitute programs or activities listed here or in our advertising.



Potential 2 Week Science Courses

EXPLORATION OF THE SEAS

A broad survey course that exposes campers to many topics in marine science, including marine biology, physical oceanography, maritime history, and geology.

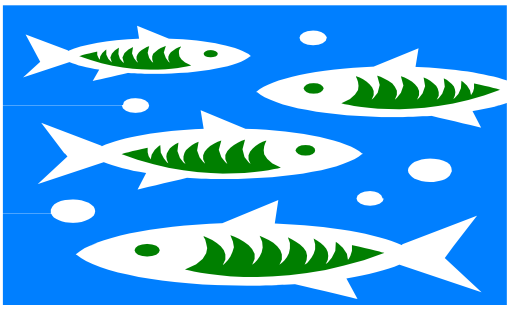


MARINE COMMUNITIES

The course studies a diversity of marine communities such as sponge flats, seagrass meadows, mangroves and coral reefs. Emphasis is on relationships among plants and animals living in these communities.

KEYS KRITTERS

An overview of many unique animals found on and around the Florida Keys. Class focuses on the identification of a diverse collection of animals indigenous to this area including birds, reptiles, amphibians, fish and invertebrates.



FISHERIES SCIENCE

A course that studies local recreational and commercial fisheries. Participants will study taxonomy, anatomy, and ecology of local targeted species. The class will review fisheries techniques, equipment, rules and regulations, and the ecological implications of removing species.

MARINE AQUARIA

This course acquaints campers with methods of maintaining marine aquaria. Several different marine communities are studied, and collecting is done in each of the areas. Campers get experience in setting up, maintaining and breaking down an aquarium.

Potential 2 Week Science Courses

ANIMAL BEHAVIOR

Study of how marine animals behave in their natural environment and why these behaviors are displayed. Topics include defense, reproduction, feeding, etc.

MARINE INVERTEBRATES

Survey of the major groups of animals without backbones that inhabit the tropical marine environments in our area. Visits to many different communities will be conducted to study their taxonomy, morphology, behavior and ecology.

MARINE ECOLOGY

During this course a variety of communities will be visited to examine how organisms interact with each other and their environment. Topics such as population density, predation, and other specific interactions will be explored.

FISH BIOLOGY

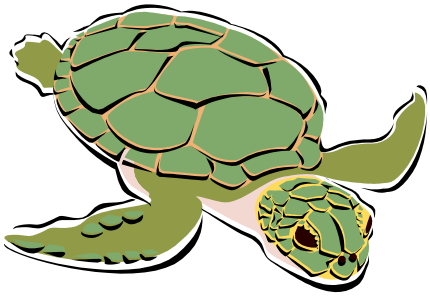
All aspects of bony and cartilaginous fishes are covered including taxonomy, anatomy, behavior, and ecology. Collections and dissections will be performed in this course. Students will participate in REEF's volunteer fish surveys and the annual fish count.

ADVANCED ANIMAL BEHAVIOR

An in-depth study of behavioral adaptations of marine organisms to their environment. Studies will include topics such as aggression, territoriality, and living space in several local species such as fiddler crabs, mantis shrimp, reef fish, intertidal mollusks and birds.

ADVANCED MARINE INVERTEBRATES

This course offers a detailed study of local marine invertebrates for campers who already possess a basic knowledge of these animals. Various marine communities will be visited where discussion and study of these invertebrates will be conducted along with collection for aquarium and laboratory work.

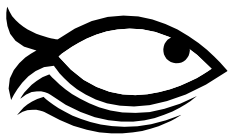


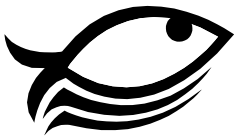
CORAL REEF ECOLOGY

This advanced course offers a chance to examine those very complex biological communities known as coral reefs. The major emphasis will be on interrelationships that exist between the reef and neighboring communities. Classes cover a broad range of subjects including coral biology; the distribution of reefs; zonation within the reef and its causes; the origin, maintenance and breakdown of reefs; and man's impact on reef areas.

REEF FISH ECOLOGY

This course will observe the distribution, habitat, and behavior of fish inhabiting the coral reef environment. Emphasis will be placed upon applying principles of ecology to reef fish communities as well as fish identification. Students will participate in REEF's volunteer fish surveys and the annual fish count.





MARINE FIELD TECHNIQUES

An exploration of scientific field methods used in marine biology and oceanography based on the Atlantic and Gulf Rapid Reef Assessment protocol. It provides an opportunity for hands-on experience with several types of research equipment and techniques.

Seacamp Association, Inc.

Marine Science

Each 1 week session has a Marine Science Theme for the week. Curriculum will be taught through snorkeling-based boat trips, kayaking, wading and collecting in nearshore waters and laboratory experiences.

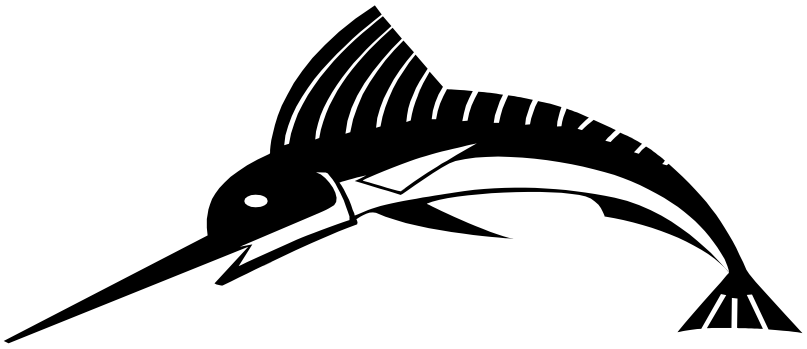
Potential 1 Week Marine Science Courses

Florida Keys Ecology

Florida Keys ecology is a course designed to give students an introduction to the definition of ecology through an exploration of hard bottom communities, learning the difference between plant and algae, predator-prey relationships, fish biology and coral reef communities. Students will learn the definition of ecology and understand the relationship between the living and non-living factors of the ecosystem and the economic value of these ecosystems through tourism, development and fisheries.

Animal Behavior

The driving forces behind animal behaviors are feeding, sexual reproduction, and predator avoidance. This class studies the many facets that make up these three survival instincts. Students will learn the difference between habitat and niche, environmental stimuli for animal behavior, symbiosis, predator avoidance behaviors, feeding behaviors as well as other interesting behaviors of the marine organisms found in the Florida Keys.



Fish Biology

This course teaches campers the anatomy and morphology of fish, by comparing boney fish with cartilaginous fish. Campers learn the clear distinction between these two groups, the evolutionary differences, classification and various behaviors that fish display. Campers will also gain an understanding from a fisheries perspective in order to appreciate why conservation of marine fisheries is important.

Marine Invertebrates

This course is a broad introduction to the largest division of animals called the invertebrates by teaching the students a basic understanding of the 6 major phyla represented in the marine environment. Students will learn the different phyla: Porifera (Sponges), Cnidaria (Jellyfish), Annelida (Worms), Mollusca (Squid), Arthropoda (Crabs & Horseshoe Crabs) and Echinodermata (Seastar), which are commonly found in the Florida Keys.