



## Course Overview

The O'Neill Sea Odyssey program opens children's eyes to aspects of nature many never considered before. Whether these children become marine biologists, mathematicians, or musicians, they will integrate their understandings and experiences of the oceans in all that they do.

This course is based on the curriculum designed for educators by the O'Neill Sea Odyssey Program based in Santa Cruz, California.

O'Neill Sea Odyssey (OSO) was founded in 1996 by wetsuit innovator and surfer Jack O'Neill. A living classroom was created on board a 65-foot catamaran sailing the Monterey Bay National Marine Sanctuary where 4th – 6th grade students from schools throughout Central California receive hands-on lessons about the marine habitat and the importance of the relationship between the living sea and the environment.

It can be hard for teachers in landlocked areas of the US to emphasize the importance of the ocean to global environmental health. Through the OSO curriculum, students will learn that all water on earth is connected and we cannot take an out-of-site-out-of-mind attitude toward ocean health. This curriculum has been developed to encourage teachers across the nation to reach their learning goals through hands-on activities on marine science and conservation.

The original program is conducted on board the catamaran with follow-up lessons at a shore-side Education Center at the Santa Cruz, CA Harbor. This course is designed to give teachers and students an opportunity to experience the learning about the marine habitat from wherever they live.

***Educators who wish to obtain CEU's will have the option of completing all required assignments and obtaining a course completion certificate.***

**Goals & Purpose:** This course is designed to give teachers and students an opportunity to experience the learning about the marine habitat from wherever they live. Educators will get access to this course and collaboration opportunities through O'Neill Sea Odyssey Community to connect with other educators. Educators will be able to utilize this course as a resource at any point once they are enrolled in it.

## ***Introduction***

This session serves as an introduction to the course.

## ***Activity 1: Navigation***

This session covers Navigation and introduces students to basic geometry, map reading, basic mathematics, astronomy, and technology in the context of a tangible every-day activity: finding a destination. OSO students are taught both modern and traditional forms of navigation and will learn how to use a compass and take a compass bearing.

## ***Activity 2: Marine Ecology***

This session encompasses the information that students will learn about Marine Ecology. Students will define an ecosystem and what is different between marine and terrestrial ecosystems. They will also learn about Kelp forest, threats to marine wildlife and habitats, and pollution.

## ***Activity 3: Marine Biology***

This session goes over the students Marine Biology lesson, which includes the life cycles of plankton, their role in the food web and the unique chemical and physical balance that helps maintain life in the sea.

## ***Activity 4: Community Service and Collaboration***

This session concerns Community Service Projects, all of which provide a great opportunity for enrichment and outreach for students. Working in their community engages students and reinforces the concept of conservation. Though this part of the course is optional unless you are applying for continuing education credits, all teachers are strongly encouraged to design a community service project that their students can take part in.

Throughout the course, opportunities are provided for you to connect your learning across sessions and to explicitly consider the implications of your learning for your classroom practice. You will also be able to revisit your work and reflections by viewing your individual Course Portfolios.