



MUSEUM OF ARTS & SCIENCES
In Association with the Smithsonian Institution

Summer Learning Institute Program Course Outline

Planet Ocean

This camp will inspire a lifelong love for the ocean and foster a deep appreciation for our planet's most precious resource! 70% of the Earth is covered by oceans, so dive right into this camp to learn about the wonders hiding beneath the surface! Learn about coral reefs, their bleaching crisis, and what it means for our planet. Dive into the darkness to discover what's lurking in the deepest parts of our oceans. Harness the power of the ocean to learn how to shape the future of our planet!

All program classes are organized to address the following aspects:

- STEM/STEAM Education.
- Cultivate an interest in Art, Science, and History.
- Continued knowledge and comprehension regarding Volusia County School Standards.
- Develop interpersonal skills such as teamwork and problem solving.
- Foster curiosity and imagination of the world around us.

Pre-requisites: None

Date: June 24-28

Software/Materials/Books/Media: Handouts and materials provided in class.

Exhibits/Galleries that correspond with camp:

- Florida Prehistory Gallery
- *Megalodon: The Largest Shark That Ever Lived* (Presented by Wagner the Lawyer Dude)
- *Tide Pools* (Presented by Expert Reserve Service)
- *Lure of Fishing* (Presented by Diane and Gene Rogers)

Course Objectives:

Students will:

- Learn about marine biology and its importance to the larger world.
- Learn about the various geologic periods of Earth and what oceanic organisms lived during the different times.
- Understand the importance of coral reefs, mangroves, and sea grass beds relating to the health of the ocean.
- Conduct water testing experiments to better understand the chemical factors relating to the ocean as well as other sources of water.

5 Day Course Outline Example:

Schedules must consider, lunch time, snack time, free play, and lessons in the gallery. All movies/shows must be approved by MOAS staff prior to viewing.

- Day One: Overview of the world's oceans, the various names for them, and an overview of Earth's geologic past. Art/craft activities.
- Day Two: Lessons on the various layers of the ocean and what organisms live in each one. Learning about bioluminescence in the deepest parts of the ocean. Art/craft activities.
- Day Three: Lessons on coral reefs and their inhabitants. Art/craft activities. A trip to one of the various exhibitions would be recommended on this day.
- Day Four: Learn about mangroves and sea grass beds, their importance to our coasts, fish nurseries, and hurricanes. Conduct water tests this day from various sources to demonstrate a knowledge of water parameters. Art/craft activities.
- Day Five: Wrap up day, lesson on the different factors affecting the ocean (i.e. climate change, overfishing, fertilizer run off, plastics, etc.) and the way humans be better custodians of the Earth. Art/craft activities.

Assessment:

Student's ability to demonstrate the following:

1= Below Expected Outcome

3= Meets Expected Outcome

5=Exceeds Expected Outcome

The Student Has:	1	2	3	4	5
Demonstrated knowledge of how to test water parameters and understand what they mean.					
Demonstrated an understanding of the critical role the ocean plays on the planet, and what issues it faces today.					
Demonstrated a desire for continued learning.					