

## NOAA Teacher at Sea Program Lesson Plan

**Tanya Scott**

**2010 NOAA Teacher at Sea**

*R/V Miller Freeman*

**Activity Title:** Careers in Marine Science

**Subject:** Science/Careers

**Grade Level:** 6<sup>th</sup> Grade

**Average Learning Time:** Two weeks

**Lesson Summary:** Students will explore the opportunities for careers in marine science in their area. Carteret County, North Carolina is an area with many marine science facilities: Duke Marine Lab, UNC Institute of Marine Sciences, NC State Center for Marine Science and Technology, NC Marine Fisheries, NOAA, and others.

**Overall Concept (Big Idea/Essential Question):** This activity is designed to acquaint students with the opportunities for careers in marine sciences found in their immediate area. Students will explore what requirements they must meet in high school, in college, and in the work force.

**Focus Questions (Specific Questions):**

- To pursue a career in marine science, what course should be taken in high school?
- To pursue a career in marine science, what course should be taken in college?
- To pursue a career in marine science, what preparations should be made beyond a bachelor's degree?
- What opportunities for employment in the marine science field are available in Carteret County?

**Objectives/Learning Goals:**

- Students will identify courses needed in high school.
- Students will identify courses needed in college.
- Students will identify skills needed in the work force.
- Students will contact one scientist and interview him/her.
- Students will tour one marine science facility in Carteret County.

**Web Resources:**

UNC Chapel Hill Institute of Marine Sciences

<http://marine.unc.edu/IMS>

NC State Center for Marine Science and Technology

<http://www.cmast.ncsu.edu/>

Duke Marine Lab

<http://www.nicholas.duke.edu/marinelab/>

NOAA: Beaufort Lab

<http://www.ccfhr.noaa.gov/about/beaufort.aspx>

NC Division of Marine Fisheries

<http://www.ncfisheries.net/>

**Common Misconceptions/Preconceptions:**

When you ask a student to describe a career in marine science they often think of working at an aquarium or swimming with dolphins. They often do not think of the research and data collection, environmental surveys, and other work associated with a career in marine science.

**Materials:**

Access to college websites and degree requirements  
Access to local marine science facilities

**Technical Requirements:**

Access to the internet

**Teacher Preparations:**

Contact local marine science facilities  
Contact individual scientists who would be willing to conduct interviews with students

**Lesson Procedure:**

1. Students will research the basic college requirements for acquiring a bachelor's degree in marine science.
2. Students will research the college requirements for acquiring an advanced degree in marine science.
3. Students will choose one marine science facility in Carteret County and research the history of the program, major goals of the program, and possible work opportunities.
4. Students will contact one scientist at the marine science facility and conduct an interview.

**Assessment and Evaluation:**

1. Students will create a written analysis of their findings.
2. Students will tour a marine science facility in Carteret County.

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