



FLORIDA STATE UNIVERSITY PANAMA CITY

Bay County Student Application:

Florida State University - Preserving our Underwater Pastures (Researching human impact on local historic artificial reef structures)

Florida State University (FSU) Panama City is currently looking for students to participate in a “meaningful watershed educational experiences” (MWEE’s) to *Study and conduct analysis of reef degradation by recreational and commercial activities in Gulf of Mexico waters. Selected students will be invited to get engaged with FSU’s Advanced Science Diving Program (ASDP) in a thriving college experience that trains students to operate in an underwater environment while applying forensic strategies to conduct scientific investigations. Students will become experienced in underwater investigations as well as in the technology used by the ASDP program, expanding enormously your learning possibilities.*

FSU Panama City has been funded to use its resources to enhance our community through the National Oceanographic & Atmospheric Administration (NOAA) B-WET Grant to include high school students in a watershed moment that provides not only great learning experiences that will last a lifetime, but also creates new advocates for caution, conservation and concern regarding our marine environments.

The Plan

FSU Panama City through its STEM Institute will recruit 16 students who are fifteen years old or older and who are in a public high school in Bay County or one of the surrounding counties. This project will begin after July 1, 2016 and will culminate July 1, 2018 utilizing the warmer summer months when students are not in school to do most of the data gathering. The 16 students during the summer of 2016 will be tasked with the following:

- Earning *Science diver* certification
- This entails learning dive equipment and how to use it
- How to use dive resources such as dive tables to maintain safety
- How to prepare dive equipment and maintain it for safety
- Maintain or gain physical requirements for safe diving
- Learning research techniques for underwater environments
- Learning data analysis strategies
- Preparing data for public presentation

Students will visit three historic artificial reefs, Black Bart, the old Hathaway bridge span and Stage II. Each of these locations has histories within the region. Students will learn how to employ their new dive expertise and to gather baseline data on reef heights, locations, and fish populations around the structure.

During the school year these students will meet one Saturday per month, September through May for nine additional days of learning. These days will continue work on earning dive certification that will lead to their ability to pass the certification exam to become an official Science Diver. This is a coveted certification and opens many doors as these students seek careers, many of which are related to the Gulf of Mexico, watersheds surrounding the Gulf as well as research and exploration of marine environments. When weather permits, additional dives will be scheduled as necessary.

Research, Data Analysis, Product Development

During the summer of 2017 students who have shown exemplary interest, enthusiasm and performance will be invited back as researchers to continue data collection on the three reefs. This will include such data as examining data related to reef degradation such as height and circumference, coral growth as well as cataloging variety of fishes and numbers of fish populations. This three week summer session will focus on utilizing the science diving expertise gained in the first year of this project to gather data, analyze that data and make comparisons with baseline data as well as to determine solutions and present findings in formal settings. During the 2017-2018 school year students will again meet one Saturday per month, September through May for nine additional days to analyze data, to discuss finding and to determine the best solutions for any challenges the data identifies. When weather permits, additional dives will be scheduled as necessary.



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Name: _____

DOB: _____ (Must be 15 years old on or before July 5, 2016)

School: _____

GPA: _____ (Minimal 3.0 unweighted)

Applicants must have successfully completed: Algebra, Chemistry, and Biology.

Preferred: *Submission of a Letter of Recommendation from a Science or Math teacher will enhance consideration of applicant acceptance.*

Applicants must be able to pass Basic Science Diver swim test before beginning:

- 1. Swim 400 yard in 12:00 Minutes (any swim stroke)*
- 2. Swim underwater on a breath hold for 25 yards*
- 3. Tread water for 10:00 Minutes*
- 4. Recover a 10 pound brick at 12 feet of water*



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I hereby waive any right that I may have to inspect and/or approve the finished product or the advertising copy that may be used in connection with, or the use to which it may be applied.

Date: _____

Full Name: _____

Signature: _____

Consent (if applicable):

I am the parent/guardian of the minor named above, and have the legal authority to execute the release above. I approve the foregoing and waive any rights in the premises.

Date: _____

Full Name: _____

Signature: _____