

Trinity Christian Academy
Mr. D. Sturgis
2018-2019

12H Marine Biology Honors Syllabus

Course Description

This class will cover all of the major fields under the science of Marine Biology, the study of life in marine environments. This class gives the students a general understanding of all living organisms that are found in marine environments. It covers all different types of marine living habitats and what sustains them. It covers what living organisms are made of and how they function. This class will also show the students how magnificently marine communities were designed by our creator. This marine biology class will establish the fundamentals and the in depth scientific understanding that will prepare the students for college science classes. Students will have to read and understand complex scientific text. They will have to interpret scientific data. The students will also do a variety of lab work including microscope work and a shark dissection. The students will have lab write ups to argue for or against their hypothesis. Students will have to direct their own investigations. They will also be able to experience marine biology up close and in person on several field trips.

Major Topics

The Scientific Method, Chemistry, Organic Chemistry, Modern Biology Technology, Biological Origins, Cytology, Microbiology, Botany, Zoology, Ecology, and Anatomy and Physiology with all topics in a marine environment. Reading Complex Current Scientific Issues, Inquire Based Learning, Using Mathematics in Lab settings, Conduct Scientific Research on Current Issues, Solve Ecological Issues.

This year my classes will be working on using our strong education to help raise awareness and solve local environmental issues. We will be focusing on toxic algae, plastic waste, and the lionfish invasion. These projects are in direct accordance to a biblical view of creation and the responsibility of mankind.

Genesis 1:26b “let him (mankind) have dominion over the fish of the sea”

Supplies

Colored Pencils, Ruler, Lab Paper (Blank Copy Paper), Lab Notebook (Three-ring-binder, 1 inch or 1 1/2 inch)

Major Projects

- Q1-** Lab Notebook Due- 10/5
- Q2-** Lab Notebook Due- 12/7
- Q3-** Lab Notebook Due - 3/8
- Q4-** Lab Notebook Due- 5/9

Field Trips

Field trips are a major part of the Marine Biology course at TCA. All students are expected to attend both field trips. The Key Largo trip in the fall and the Jupiter Island trip in the spring.

Discipline Plan

Virtues:

- Show Good Judgment
- Practice Self-Restraint
- Exhibit Courage
- Demonstrate Fairness

Rules:

- No disrespect to authority or other students.
- No verbal or physical altercations.
- No sleeping or appearing to be sleeping in class.
- No cheating.
- Follow the school dress code.

Consequences:

- Warning
- Modified seating chart/loss of privileges/email home
- Office referral

Grading

50% -Tests / Major Projects

35% -Quizzes

15% - Homework / Daily Work

Office Hours/Contact

My after school office hours are on Tuesday and Thursday from 3:30pm-4:00pm. During my coaching seasons I am available by appointment only. The best way to contact me is through my email, sturgis.daniel@tcmail.org