

# Bellarmino Preparatory School

## Marine Chemistry Program

### PROGRAM PHILOSOPHY

The Marine Chemistry Program is dedicated to the protection and preservation of the environment. Through scientific research, students seek solutions to scientific problems to make the world a better place for all its inhabitants

### PROGRAM OBJECTIVES

- Provides students the opportunity to do exciting, original scientific research outside the normal classroom setting.
- Develop skills necessary to do authentic original research culminating in writing of a research paper to be published in local and national writing contests.
- Provide opportunities for students to distinguish themselves for acceptance into more competitive universities and winning of financial scholarships.
- Provide outdoor enrichment activities that promote social interaction with peers and develop appreciation for the environment.

### COURSE OUTLINE:

#### **Freshman:**

Students spend a week prior to their freshman year learning chemical oceanography. Monthly follow-up sessions are conducted at the Titlow Marine Sanctuary during the course of the year. After a school year collecting data, the rising sophomore students spend a week in the summer learning ways of analyzing data and how to present findings

#### **Junior:**

Research projects are selected. Topics are researched, problems and hypothesis developed and data collected over the span of the school year and summer.

#### **Sophomore:**

Spring of 2nd semester students are introduced to NW fish and invertebrate identification. This is followed up in the summer with two online classes; Statistics and Introduction to Scientific Research

#### **Senior:**

During the fall semester students analyze results, write a research paper and present research findings at the Senior Symposium. Students will enter research paper into local and national science competitions in the spring

### CANDIDATE SELECTION CRITERIA

- Bellarmine entrance exam score
- Math/Science recommendations
- Student essay
- Prior grades
- "Tryout" week

### ENRICHMENT ACTIVITIES

- Skin & Scuba Diving
- Class Campouts
- Trip the University of Hawaii @ Momoa

### FEE

- \$440 per year – ½ credit honors credit earned
- Fee is charged to your Bellarmine account

