OBJECTIVE
The goal of this course is to expand your knowledge in all aspects of Earth’s oceans, including the geology, chemistry, physics, and biology that occur within them. You will learn how these components interact and how it affects your life. You will start to become comfortable using the scientific vocabulary of oceanography to describe the natural processes you will learn about and observe. There will be required reading, homework, five exams and up to four alternate site activities. Some math will be necessary and use of the metric system is essential. At the end of the course, you should be more knowledgeable about plate tectonics, seawater chemistry, ocean circulation, marine organisms, climate change, ocean pollution and your relationship with the ocean.

PRE-REQUISITE
The recommended preparation for this course is eligibility for English 84

AGENDA

Week 1
8/23       Introduction, Scientific Method, Origin of Earth and Ocean, Earth’s Interior
T&T Chapter 1

                      Lab 1: Map Skills
                      Lab 2: Contour Maps and Profiles

Week 2
8/30       Plate Tectonics and Ocean Floor
T&T Chapter 2

                      Lab 2: Contour Maps and Profiles continued
                      Lab 3: Plate Tectonics
Week 3  
9/6  
Exam  
Marine Provinces  
T&T Chapter 3  
Lab ASA – Cabrillo Aquarium

Week 4  
9/13  
Marine Sediments  
T&T Chapter 4  
Lab 4: Sediments  
Lab 5: Sedimentary Rocks

Week 5  
9/20  
Water and Seawater  
T&T Chapter 5  
Lab 6: Water and Seawater Chemistry

Week 6  
9/27  
Exam  
Air-Sea Interaction  
T&T Chapter 6  
Lab 7: Climate Change

Week 7  
10/4  
Ocean Circulation  
T&T Chapter 7  
Lab 8: Ocean Currents

Week 8  
10/11  
Waves and Water Dynamics  
T&T Chapter 8  
Lab 9: Waves  
Lab 10: Tsunamis

Week 9  
10/18  
Exam  
Tides  
T&T Chapter 9  
Lab 11: Tides

Week 10  
10/25  
The Coast: Beaches and Shoreline  
T&T Chapter 10  
Lab 12: Shorelines
Week 11
11/1    The Coastal Ocean
        T&T Chapter 11
        Lab ASA Sandy Shores

Week 12
11/8       Exam
        Biological Productivity and Energy Transfer
        T&T Chapter 13
        Lab 14: Primary Productivity

Week 13
11/15     Animals of the Pelagic Environment
        T&T Chapter 14
        Lab ASA Redondo Pier

Week 14
11/22     Animals of the Benthic Environment
        T&T Chapter 15
        Lab 15: Coral Reefs

Week 15
12/6     Lab 13: Remote Sensing
        Final Exam

GRADING
Your grade will be based on the exams, homework, and attendance as follows:
    Five exams  = 50%
    Laboratory = 30%
    Homework   = 10%
    Attendance = 10%

GRADING SCALE
A = 90-100%, B = 80-90%, C = 70-80%, D = 60-70%, <60 = F

EXAMS
There will be five exams. Each exam will be worth 10% of your grade. Language translators (electronic dictionaries) cannot be used during exams (paper dictionaries are okay).

LABORATORY Lab grade is based on the weekly completion of all lab activities. You will need to BUY THE LAB MANUAL (Exploring Southern California Oceanography) to complete the lab activities. Late labs will be penalized 15%. There are no make-up labs.
HOMEWORK AND READING
Homework will be assigned on Saturday and will be due the next Saturday. Homework will count for 10% of your grade. You will need to **BUY THE TEXT BOOK** (Essentials of Oceanography by A. P. Trujillo and H. V. Thurman) so that you can read the assignments and answer homework questions.

ATTENDANCE
Attendance is expected and will be taken. Attendance will count 10% of your grade. Too many absences will negatively affect your grade.

LATE HOMWORK, MISSED EXAMS, TARDINESS, and CELL PHONES
I expect that there will be none of the above. Late homework will start with a 5% penalty for that assignment. There will be no make-up exams without a verifiable written excuse. Tardiness is disruptive to the whole class, be respectful and be on time. Answering cell phones and private conversations are not allowed in the classroom as they are distracting to the other students.

CLASSROOM CODE OF CONDUCT
**Unacceptable** behaviors in the Standards of Student Conduct include:

1) cheating and plagiarism
2) conduct that jeopardizes health and safety
3) tardiness
4) profanity
5) pornography
6) children or pets in class
7) private conversations or inappropriate displays of affection
8) uncooperativeness
9) continually leaving ones seat
10) eating and drinking
11) reading unrelated materials
12) soliciting funds and/or signatures
13) Use of all unauthorized electronic devices such as walkmans, phone, beepers, pagers, ipods, and music players.