Introduction to Oceanography

Course Requirements:

This course is a college introductory approach to major concepts in oceanography. This course will include technology and Global Climate Change as major themes in ocean and estuarine sciences. It is up to the learner to read all materials, review all questions and practice problems in the text. The course is not all lecture material as it will highlight practical aspects in the field. It will also include text assignments and readings. It is up to you, the learner, to ask questions, read the text and complete major projects.

1. Grading will be a combination of major unit evaluations, coupled with a major research project (possible team option) due in January 2020. The project will culminate in a formal presentation and final written field write-up.

2. Journaling will be very important! You will maintain your journal and they will be checked as scheduled by myself or through peer review. Your journal will be turned in the end of the course for a final check as part of the course requirement. Your journal will be for notes, field pictures, guest lecture notes, field trip notes and will include your reflections.


4. You will write an individual research paper on the topic related to the project on Friday November 1, 2019. The paper must include at least 5.5 pages of body text (not title page, charts, reference pages, etc…). It should be in APA format. Topics will be approved by me prior to investigation (see paper requirement and suggested paper format rubric).

5. There will be formal field write-ups that will be required during the semester. Points will be awarded according to detail and completeness (each is worth at least 30 points). The areas include: 1) physical oceanography; 2) geological oceanography; and 3) chemical oceanography, 4) combination and 5) based on research results. Write-ups must include field data, statistical analysis, and relate to the concepts taught in the course.
6. The midterm will incorporate your paper, possibly a project and take home exam. There will be a comprehensive final evaluation in this class along with unit evaluations, at least one take home evaluation, various quizzes, presentations, and the final team project presentation (due in January). The final exam review is posted!

Course Overview: This course will provide students with improved scientific skills and a better understanding of topics in the fields of ocean science. This course will also improve critical thinking. Achievement will be determined through a wide variety of factors as this course is a hands-on approach to oceanography and how it relates to Technology. This course is about you improving your own skills!

Grade breakdown:

Numerical grades will be assigned in accordance with the MATES grading scale established by the Ocean County Vocational Technical School District. The following will constitute the grades in this course. Points will be assigned for the course and grades will be determined as a result of points earned out of total possible points for the following areas in this course...

- Evaluations (written and oral)
- Laboratory and Field Exercises
- Journals and Journal Reports
- Major Projects
- Assignments, HW
- Participation

Additional Requirements:

Please complete community service hours and forms, which can include any service to the community that involves volunteering time. Some may be linked directly to a field research project when completing aspects on your own time. We will organize an overnight for October (16-17 and 17-18) at the Jacques Cousteau National Estuarine Research Reserve to include a comprehensive sampling and field visit. There may be a cost of $5 associated with this overnight field experience to cover food costs.

You will conduct a research project independently or a class project with two or three other students and will be responsible for collecting the data necessary to making it work! My overall goal is to improve your research, analytical, and presentation skills!

Do your work on time and you should do well in this course. This will be a very interactive, field-oriented approach to ocean science and Technology. This is a college course designed to give you a great overview of oceanography, its applications, and teaching you skills that will make you successful at the next level and beyond. We move at a decent pace and it is up to you to ask questions!