

Physical Oceanography Laboratory

MAR 353 - Fall 2007

Thursday 9:50am-12:50pm

Marine Station 1, Nat Sci W105, elsewhere, Stony Brook - Southampton

Instructor Information

Name : Joe Warren, Assistant Professor
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Office Hours : Th 14:00–16:00 and by appointment

Teaching Assistant : Amanda Burson, amburson@yahoo.com
Office Hours (main campus) TBD

Course Description

An introduction to the measurements, equipment, and data processing techniques used to study the motion of fluids (air and water) on the earth. Students will learn to use scientific instruments, design sampling strategies, and utilize previously collected data sets to study both local and global processes. At-sea collection and analysis of data will be emphasized.

Prerequisites

Students should have taken or co-register for MAR 350 or MAR 352

Textbook

Required : Robert H. Stewart, *Introduction to Physical Oceanography*
Text is available in the bookstore at Stony Brook Southampton.

Grading

Your grade in the course will be earned / calculated as follows:

Lab Performance	10%
Lab Reports	75%
Lab Practical Exam	15%

Student Expectations

Will attend class, be courteous, and do their best Will be prepared and active participants in the learning process Will be prepared for lab activities (i.e. appropriate clothing for going out in the field or on the boat). No open toe-shoes are allowed on the boat.

Assignments

Late Assignments will not be graded.

Un-stapled assignments will lose 15% of that assignments points Lab reports are due either at the end of the lab period or beginning of the next class period. The instructor will inform you of what the deadline is at the start of the lab period.

Group Work

Much of the data collection and analysis will require you to work with other students to reach your final goal. All students whose names are on the final report are expected to have contributed substantially to the final product.

Ocean Data View

You will be using a software program called Ocean Data View to assist you in analyzing the data that we collect during our labs (and you may find it useful elsewhere too). It is free for educational use and available for all computer platforms (Windows, Linux/Unix, and Mac); so you may wish to install it on your own computer. The website for the program is: <http://odv.awi.de/> It is a great program, but not without its own “features” which you will soon discover.

Absences

Any unexcused absence from a laboratory will result in a significant loss of points towards your final course grade. YOU are responsible for informing the professor ahead of time (by email or phone at least 1 hour prior to class start) if you will not be able to attend a lab. You are responsible for any material, data, analysis that was covered during that lab. In short, do not miss lab.

Academic Honesty

If you are caught cheating on any assignment in the class, you will automatically fail that assignment and I reserve the right to give you a failing grade for the course.

Stony Brook University Syllabus Information

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person’s work as your own is always wrong. Any suspected instance of academic dishonesty will be reported to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at: <http://www.stonybrook.edu/uaa/academicjudiciary/>

Stony Brook University expects students to maintain standards of personal integrity that are in harmony with the educational goals of the institution; to observe national, state, and local laws and University regulations; and to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, and/or inhibits students’ ability to learn.

Course Calendar

Please understand that this schedule is subject to change. In particular, weather will play a primary role in determining whether or not we will be inside or in the field for lab. Always assume that we will be going outside (whether its raining, snowing, or sunny) and dress appropriately.

Date	Topic	Reading
Thu 06 Sep	Introduction, Facilities Tour	Ch. 1, 2
Thu 13 Sep	Lab #1: Ocean Data View	Ch. 6
Thu 20 Sep	Lab #2: Inlet Profiling	
Thu 27 Sep	Lab #3: Ocean Data I	
Thu 04 Oct	Lab #4: Peconic Bay I	
Thu 11 Oct	Lab #5: Ocean II	
Thu 18 Oct	Lab #6: Peconic Bay II	
Thu 25 Oct	Lab #7: Ocean Data Analysis	Ch. 16 and 17
Thu 01 Nov	Lab #8: Salt Wedge	
Thu 08 Nov	Lab #9: Weather Forecasting I	
Thu 15 Nov	Lab #10: Waves and Tides	
Tue 20 Nov	MEETS ON TUESDAY LAB TBD	
Thu 29 Nov	Lab #11: Satellite and On-line Data	
Thu 06 Dec	Lab #12: Preparation for Practical Exam	
Thu 13 Dec	Lab Practical Exam	
XXX XX Dec	No Final Exam	