

**GLY 480: COASTAL OCEAN RESEARCH & MONITORING METHODS
SPRING 2010**

Class: Friday, 1- 3:50 PM

Room: Deloach 120

Instructor: Jennifer Dorton

Office: CMS

Office Hours: by appointment

Office Phone: 962-2777

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Text:

No course text book. All text required is posted on Blackboard. Reading requirements are outlined in the syllabus.

Purpose:

To introduce students to the use of oceanographic equipment and techniques in the field setting and the application of data to coastal ocean issues.

Grading:

Final course grades will be based on the total score of all graded exercises and class participation.

Graded exercises will include:

- written homework exercises (20%)
- submission of field notebook (10%)
- mid-term (20%)
- oral presentation (10%)
- written report (40%) in lieu of final exam

Honor Code:

It is UNCW's stated policy that no form of dishonesty among faculty or students will be tolerated. Although all members of the university community are encouraged to report occurrences of dishonesty, honesty is principally the responsibility of the individual. Reporting and adjudication procedures have been established to enforce the university's policy of academic integrity, to ensure justice, and to protect individual rights. The University's Academic Honor Code is applicable at all times in this class. The Honor Code is found in the "Student Handbook and Code of Student Life" and contains details of the honor code.

SCHEDULE

DATE	TOPIC	ASSIGNMENTS	PRESENTATIONS
Jan. 8	Introduction to coastal ocean observing; Library visit – Peter Fitzler	Reading: “Article Reading Tips”	
Jan. 15	Data collection and field notebook requirements Meteorological data; Conductivity &/ Temperature	Reading: “How to Write & Publish a Scientific Paper”	<ol style="list-style-type: none"> 1. Wind speed, gust & direction 2. Barometric pressure 3. CTD 4. DO
Jan. 22	Light attenuation and optical measurements Discussion of written report format, literature review, etc.	Reading: “Basic Observational Buoy Design”	<ol style="list-style-type: none"> 1. Turbidity & Secchi disk 2. Acoustic water level sensor 3. Transmissometer 4. Chl <i>a</i> Fluorometer
Jan. 29	<i>Speaker:</i> Steve Pfaff, NOAA National Weather Service Waves & Currents Mapping/Chart reading	Preliminary Buoy diagram (sketch in field notebook)	<ol style="list-style-type: none"> 1. HF Radar for Currents 2. Nortek Aquadopop 3. Electromagnetic current meter 4. ADCP
Feb. 5	Build a Buoy – Meet at CMS	Turn in citations & draft hypothesis for research paper	<ol style="list-style-type: none"> 1. Wave rider buoy
Feb. 12	Build a Buoy – Meet at CMS	Turn in finalized hypothesis and proposed data collection methods	
Feb. 19	Build a Buoy – Meet at CMS		
Feb. 26	Research Cruise: <i>R/V Cape Fear</i>		
Mar. 5	Buoy deployments & mid-term – Meet at CMS		
Mar. 12	NO CLASS		
Mar. 19	Review papers: how to write the intro, methods, discussion and conclusions.	Review “How to Write & Publish a Scientific Paper”	<ol style="list-style-type: none"> 1. ROV 2. Webb glider 3. Sea surface temperature (satellite derived)
Mar. 26	Project Time	REQUIRED: Sign up for time to discuss papers during class period	
Apr. 2	NO CLASS		
Apr. 9	Project Time		
Apr. 16	Project Time		
Apr. 23	Last Day of Class	Research Paper Due	