

GEOLOGY 480/592 Section 01 - Coastal Ocean Methods  
Spring 2009

Lecture - Friday - 10:00-11:50 - Deloach Hall 105  
Lab - Friday - 12:00-14:50 - Deloach Hall 105 (unless otherwise noted)

COURSE SYLLABUS for Leonard portion of course

Instructor: Dr. Lynn Leonard

Office: DL102

Phone: 962-2338

Email: [lynnl@uncw.edu](mailto:lynnl@uncw.edu)

Office Hours: 9-10 MTWTh (or by appointment)

Instructor Web Page: <http://www.uncw.edu/people/lynnl>

Textbook: No textbook purchase required. Books and articles on reserve in Randall Library, handouts will be provided, and [PDF's of chapters and articles will be available online](#)

Academic Honor Code: The University's Honor Code is enforced in this class. Please do your own work. Complete details of the Code are in the current Student Handbook.

Grading: GLY 480 grades will be based on: Exercises and projects 60%. Mid-Term Exam 40%. GLY592 grades will be based on: Exercises and projects 45%. Research paper 15% and Mid-Term Exam 40%.

Exam will cover information presented in lecture, problem sets and in the assigned readings.

Course letter grades will be assigned as follows:

Percentage Score	Final Grade	Percentage Score	Final Grade
92.0 - 100.0	A	75.1 - 79.9	C+
90.0 - 91.9	A-	70.0 - 75.0	C
87.1 - 89.9	B+	67 - 69.9	C-
83.1 - 87.0	B	60 - 66.9	D
80.0 - 83.0	B-	0 - 59.9	F

## **TENTATIVE FIELD/LABORATORY SCHEDULE (Jan 9 – Feb 27, 2009)**

**Dates in bold denote off campus laboratories**

- January 9<sup>th</sup> Field method fundamentals, record keeping, and map reading  
**January 16<sup>th</sup>** Beaches: Topographic profiling, sediment sampling, and box coring  
January 23<sup>rd</sup> Sediment Characterization: Grain size analysis, core processing, core descriptions  
**January 30<sup>th</sup>** Moving water: Measuring velocity, discharge and turbulence & Water quality sampling: field collection, field measurements and estimating load  
**February 6<sup>th</sup>** Wetlands field methods: sedimentation rates, vegetation characteristics, soils  
**February 13<sup>th</sup>** Wetlands field methods II: sedimentation rates & Water quality II: laboratory analysis  
February 20<sup>th</sup> Data Analysis

## **TENTATIVE LECTURE SCHEDULE (Jan 9 – Feb 27, 2009)**

- January 9<sup>th</sup> Introduction, record keeping, map interpretation  
January 16<sup>th</sup> Coastal morphology: Readings: 1) Waves, Tides and Shallow Water Processes, Open University: Chapter 5 Sec. 5.1, Sec. 5.3, Sec. 5.4, 2) Coasts, Davis (1996) Chapter 7, p. 157-185., 3) Beach Processes and Sedimentation, Komar (1998) Chapter 7, p. 270-276.  
January 23<sup>rd</sup> Sediment characterization. Readings: Petrology of Sedimentary Rocks, Folk (1980) p. 1-7 and 31-33 and U.S. GEOLOGICAL SURVEY OPEN-FILE REPORT 00-358 (2000) ONLINE: <http://pubs.usgs.gov/openfile/of00-358/>  
January 30<sup>th</sup> Water quality and fluid dynamics: Readings: Sediment movement by fluid flow, in Origin of Sedimentary Rocks, Blatt/Middleton/Murray, Chapter 4, p. 90-96  
February 6<sup>th</sup> Coastal wetlands: Readings 1) Coasts, Davis (1996) Chapter 7, p. 151-156, 2) Saltmarshes, Allen and Pye (1992) Chapter 1  
February 13<sup>th</sup> TBA  
February 20<sup>th</sup> Data analysis and interpretation  
February 27<sup>th</sup> Mid-term Exam

## **EXAM SCHEDULE AND HOLIDAYS**

MARTIN LUTHER KING DAY: Monday, January 19  
SPRING BREAK: Saturday, March 7 - Sunday, March 15  
GOOD FRIDAY: Friday, April 10  
LAST DAY OF CLASSES: Monday, April 27  
FINAL EXAM: TBA