

MSCI/GEOL 215L: COASTAL ENVIRONMENTS OF THE Southeastern U.S

GEOL 215L -- Coastal Environments of the Southeastern U.S. (Laboratory). {=MSCI 215L} (1) Exercises examining coastal ecology, geomorphology, hydrogeology, shoreline processes, environmental issues, and human impact. Two laboratory hours per week. Scheduled field trips required. Not available for marine science/Geology major credit.

Professor: Dr. Subra Bulusu
Associate Professor
Satellite Oceanography Laboratory, EWS 508A
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Lab meeting: SECTION 1 WEDNESDAY 12:20 PM - 2:20 PM EWSC 104
SECTION 2 THURSDAY 10:15 AM-12:15 PM EWSC 104

Lab Instructor: Bradley Dean
Office: CSSC (Callcott Building) 205
Email: deanbj@email.sc.edu
Office Hours: M 1:00-3:00
F 10:00-12:00

Course objectives and goals

This course examines important aspects of the coastal zone, such as tide analysis and prediction, wave's dynamics, shoreline evolution, navigation, sediments characterization, and land use. From the point of view of the lab work, the coastal environments are presented as an interesting and fascinating space, full of possibilities of learning and knowledge sharing.

Learning outcome

Students will be able to describe verbally or in writing:

- about the costal environment of the Southeastern U.S.
- how costal environments will change with tides, wave controlled processes and hurricanes.
- the fundamental principles of costal erosion, movement of barrier islands, shifting of tidal deltas
- at least one or two current issues facing the ocean/costal environment.
- the concept of how the costal zone operates and learn to live.
- how wind and wave energy affects the coast environment of South Carolina.
- how wind movement creates waves and drives the surface circulation of the oceans.
- Apply the principles and language of the natural sciences and associated technologies to historical and contemporary issues.

Academic Responsibility

Faculty and students at USC are obligated to follow the USC Code of Academic Responsibility. It is expected that all class members demonstrate intellectual honesty and respect the academic rights of their classmates. If you have forgotten your responsibilities under this Code, please re-read Student Affairs Policy STAF 6.25 on USC's web page.

Even while working in groups, each person must do his/her own work! Plagiarism will not be tolerated. If this occurs you will receive a zero for the assignment and the matter will be reported to the University authorities.

Lab Manual: Labs will be posted on Blackboard and each student will be expected to arrive with a printed copy to each lab class.

Attendance: Attendance is mandatory. Missed labs will result in a zero for the lab and quiz. There will be no switching lab classes. The lowest lab and quiz grades will be dropped, including a zero resulting from a missed laboratory. However, students that miss lab on March 28/29 and April 4/5 will receive a zero that will NOT be dropped. Extenuating circumstances will be reviewed on a case-by-case basis and shall be discussed with me.

Lab Rules: No food or drinks.
No open-toed shoes (flip flops, sandals, etc). There are no exceptions to this. If you are not prepared you will be asked to leave the lab.

Tentative Lab Schedule:	Jan 18/19	Orientation
	Jan 25/26	Lab 1: Coastal Navigation
	Feb 1/2	Lab 2: Tides
	Feb 8/9	Lab 3: Waves
	Feb 15/16	Lab 4: Wind
	Feb 22/23	Lab 5: Coastal Sediments
	Feb 29/Mar 1	Lab 6: Grain Size / Settling Velocity
	Mar 7/8	NO LAB – SPRING BREAK
	Mar 14/15	Lab 7: Lagoons / Coastal Wetlands
	Mar 21/22	Lab 8: Anthropogenic Factors
	Mar 28/29	Lab 9: Coastal Land Use Introduction
	Apr 4/5	Lab 10: Presentation Preparation
	Apr 11/12	Lab 11: Presentation preparation
	Apr 18/19	Presentations

Grading:
Labs: (8 Labs) x (100 Points Each) = 800 Points x 40% = "A"
Quizzes: (8 Quizzes) x (100 Points Each)=800 Points x 30% = "B"
Project: (1 Presentation) x (100 Points) = 100 Points x 15% = "C"
S.Break. Assignment:(Paper)x(100 Points)=100 Points x15%= "D"

There is a total of 1800 Points possible total. Divide your total by 1800 then multiply by 100 to determine your percentage grade.

Ex: $A + B + C + D = (\text{total points}/1800) * 100 = \text{Percentage Grade}$

Labs are due at the beginning of your next lab. One point will be deducted for each day late.

Grading Score:

A = 90% to 100%

B+ = 87% - <90%

B = 80% - <87%

C+ = 77% - <80%

C = 70% - <77%

D+ = 67% - <70%

D = 60% - <67%

F = < 60%