**SYLLABUS**

Update 20110824

**Coastal Geoenvironments and Change (GEOL 5308)**

Fall Semester 2011
Tuesday and Thursday, 11:00 am to 12:15 pm
Center for Instruction 127

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**Description:** Investigations of the origin, character, and processes of coastal geoenvironments with an emphasis on tracking historical and projecting future changes. Interactions of geological and biological processes and impacts of human activities on coastal depositional systems are examined. Includes applications of remote sensing, ground studies, and GIS for mapping geoenvironments and analyzing change. Readings in scientific literature, day field trips, and class participation.

**Format:** The course will be taught in a lecture and discussion format with heavy emphasis on the discussion. Three day-long field trips are required. In addition to background reading in the text book, you are required to critically examine 4 to 8 technical papers per week that I will assign. You will be asked to present a verbal synopsis of one of the papers to the class each week.


**Student Learning Outcomes:**
1. Students will be able to critically evaluate the primary scientific literature regarding coastal geoenvironments.
2. Students will be able to decipher the impacts of processes acting at various spatial and temporal scales that produce characteristic coastal geoenvironments.
**Course Grading:**
Midterms 1 and 2 = 30% each  
Final = 40%  
Thinking out loud: invaluable

Before each exam, I will give you a list of questions for you to prepare. During the exam, I will ask you to answer some of those questions without the aid of your notes. These “pretest” questions will count for about 70% of your exam grade. The remaining 30% will be questions concerning class discussions, lectures, and observations from the field trips.

**Provisional Course Outline and Schedule**

**Week 0.** Introduction  
August 25 - class

**Week 1.** Coastal settings: classification of coasts, origins of depositional systems  
August 30 – class  
September 01 - class

**Week 2.** Physical processes: waves, sediment transport, bedforms, structures  
September 06 – class  
September 08 - class

**Week 3.** Shoreface and beaches  
September 13 – class  
September 15 - class

**Week 4.** Shoreface and beaches – Field trip 1  
September 20 – class  
September 22 – class

**Week 5.** Dunes and washovers  
September 27 – class  
September 29 – class

**Week 6.** Tidal inlets  
October 04 – class  
October 06 – class, Gibeaut possibly out  
October 07 - **Midterm 1, actual time is up to the student**

**Week 7.** Lagoons, marshes, flats, tidal channels  
October 11 – class  
October 13 – class

**Week 8.** Lagoons, marshes, flats, tidal channels  
October 18 – class  
October 20 – class, Gibeaut out of town

**Week 9.** Barrier island systems - **Field trip 2**  
October 25 – class  
October 27 – class, Gibeaut out of town

**Week 10.** Estuaries  
November 01 – class  
November 03 – class
November 04 - **Midterm 2 – actual time is up to the student**

Week 11.  
Estuaries  
November 08 – no class, Gibeaut out of town, CERF  
November 10 – no class, Gibeaut out of town, CERF

Week 12.  
River deltas  
November 14 -  
November 15 – class  
November 17 - class

Week 13.  
River deltas  
November 22 – class  
November 24 – no class, Thanksgiving

Week 14.  
Analysis of status and trends – **Field trip 3**  
November 29 – class  
December 01 – class

Week 15.  
Analysis of status and trends  
December 06 – class, Gibeaut out of town, last day

Week 16.  **Final**

*Notice to Students with Disabilities*: Texas A&M University-Corpus Christi complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. If you suspect that you may have a disability (physical impairment, learning disability, psychiatric disability, etc.), please contact the Services for Students with Disabilities Office, located in Driftwood 101, at 825-5816. If you need disability accommodations in this class, please see me as soon as possible.

***Grade Appeal Process.*** As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.