Fall 2011 Syllabus (v1.0) GEO 371C Marine Geology (27640); GEO 391 Marine Geology (27925) WF, 2:00 to 3:30 pm, IGB 3.222

I. Instructors

Dr. Mead Allison: Contact Info: EPS 4.102B, 471-8453, mallison@mail.utexas.edu

Office Hours: Wed., 3:30-5:00 and by appointment

Dr. Terry Quinn: Contact Info: JGB 5.220B, 471-0464, tquinn@mail.texas.edu

Office Hours: Wed., 3:30-5:00 and by appointment

II. Course Objectives

The primary objective of this course is to survey the field of marine geology by exploring the structure and evolution of the ocean basins and ocean margins, the chemistry of the oceans, the sediments in the marine environments, the products and processes of the land-sea interface, and the history of the oceans over geologic time.

III. Course Format and Procedures

Perquisites: GEO 416M

Course Material

There is no assigned textbook for this class. Reading material and select lecture notes will be provided as pdf files on the Blackboard (Bb) website.

Use of Blackboard

In this class we use Blackboard—a Web-based course management system with password-protected access at http:// courses.utexas.edu —to distribute course materials, to communicate and collaborate online, to post grades, to submit assignments, and to give you online quizzes and surveys. You can find support in using Blackboard at the ITS Help Desk at 475-9400, Monday through Friday, 8 a.m. to 6 p.m., so plan accordingly.

Term Paper

The research paper will be an individual effort of the student of at least 10 page length plus references on computer using double-spaced, 12 point Times New Roman type with 1" margins in all directions. A list of possible topics is posted on Bb now. A student may work on a topic of their choosing subject to the prior approval of the instructor. Graduate students are highly encouraged to self-select a topic. At least 10 references from the original, peer-reviewed journal literature will be required to supply the information necessary for the body of the paper. References such as textbooks, encyclopedias, web summaries, or monographs will not be accepted.

IV. Academic Integrity

University of Texas Honor Code

Each student in this course is expected to abide by the University of Texas Honor Code: "The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community."

Any work submitted by a student in this course for academic credit will be the student's own work.

V. Other University Policies

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities at 471-6259 (voice) or 232-2937 (video phone) or

http://www.utexas.edu/diversity/ddce/ssd

VI. Tentative Course Schedule

Part 1: Introduction to Marine Geology

Ocean Basins

Historical Perspectives

Instrumentation

Part II: Deep-Sea Sediments: Processes and Products

Marine Sediments

Ocean Chemistry

Ocean Circulation

Proxies of ocean change

Glacial-Interglacial Changes in the Ocean

Marine Stratigraphy

Part III: Coastal Marine Geology

Continental Slope and Rise Sedimentation

Continental shelves

Sequence Stratigraphy

Littoral Zones and Beaches/Barrier Islands

Reefs and Carbonate Environments

Estuaries

River Deltas and River Dispersal Systems

Part IV: Ocean History - Select Examples (TBA); Class Discussion

VII. Grading Procedure

Course grade will be determined as follows:

Exam 1 (35%), Exam 2 (35%), Term paper (20%), Class Discussion (10%)

Examination Dates: Exam #1, October 5; Exam #2, November 18

Note: There will be no final exam in this class

Term Paper

Must be submitted electronically to Drs. Allison and Quinn

Graded for content, clarity, and structure with grammar and spelling considered.

List of 10 References: due on or before September 28

Complete Research Paper: due on or before November 9