



MNS 354F: Marine Geology – Spring 2002

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Meeting time: Tuesdays and Thursdays, 11–12:30

Place: ACES 2.402 (Austin) and MSI Video Classroom (Port Aransas)

Most lectures will be delivered via the Austin–Port Aransas video link. I will be in Austin on average one week out of every 3 or 4. When I am in Port Aransas, I will not have defined **office hours** other than that I will always be at my desk for the two hours before class ñ email is the best way to reach me (phone is good, but long distance) and can be used any time. When I am in Austin, I will keep you informed of my whereabouts and availability, but will always be available between 9 and 11 a.m. on class days, in the Marine Science office, ESB 102.

Course Description *****Readings** *****Requirements**

****[Schedule \(lectures.html\)](#)

Web site

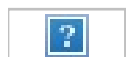
[Lecture notes \(lectures.html\)](#) (i.e., downloadable images of my PowerPoint slides) will be available on this web site. You will need a free PDF reader (e.g., Adobe Acrobat Reader) to download and view the files. While we will endeavor to adhere to the indicated lecture schedule, changes may occur. Some flexibility is built in, and any major changes will be announced well in advance. You are expected to keep up with the indicated reading.

You will also find [links to various web resources \(notes&links.html\)](#) on the site, updated through the semester. [News and class reminders \(news.html\)](#) will be posted as well. Please plan to check the site fairly regularly.

Aims of the course:

The goal of the course is to develop an understanding of the processes controlling the structure and evolution of the ocean basins, and the tools and methods used by marine scientists in developing this understanding.

The history of the studies of plate tectonics and marine geology are heavily intertwined: for instance, most modern plate boundaries reside in the oceans. The course will therefore start with an introduction to plate tectonics, and the major types of plate boundaries and intra-plate tectonic processes in the ocean. We will study the structure and composition of oceanic crust produced at spreading centers, its subsequent alteration by on- and off-axis interaction with seawater, its burial by sediments and consumption in collision zones. We will look at the distribution and composition of major sediment types, and the use of the sedimentary record for deciphering the geological, climatological, and oceanographic histories of the oceans.



Readings

You are not required to purchase a textbook for the course. Several books are on reserve in the Geology Library. Readings from these texts and other sources will be assigned throughout the semester. These assignments will be given in class and [posted on the web site \(lectures.html\)](#). You are responsible for any reading I assign. Some of the books are included as background and reference material for those of you with different backgrounds. All are available for 2 hour checkout.

The books on reserve are:

Marine Geology , by J.P. Kennett

Marine Geology: A Planet Earth Perspective , by R.N. Anderson

The Sea Floor: An Introduction to Marine Geology , by E. Seibold and W. Berger

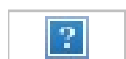
The Ocean Basins: Their Structure and Evolution , by the Open University Course Team

Ocean Chemistry and Deep Sea Sediments , by the Open University Course Team

The Solid Earth: An Introduction to Global Geophysics , by C.M.R. Fowler

The Face of the Deep , by B. Heezen and C. Hollister

Photographic Atlas of the Mid-Atlantic Ridge Rift Valley , by Ballard and Moore



Course Requirements and Grading

Grading will be based on four quizzes, a report, and a final exam. The relative importance of each to the final grade is as follows:

In-class quizzes: 60% (four quizzes at 15% each)
Current events report: 10%
Final Exam (cumulative): 30%

Quizzes will be relatively frequent and are intended to give both me and you an ongoing sense of your progress and understanding of the course material. They will be a combination of multiple choice, short answer, and more thought-provoking questions.

For the report, you must write a five page (roughly) review or summary of a recent finding or news report having to do with Marine Geology. You may hand this in at any time during the semester, but it must be handed in before the last day of class, May 2.

[Click here \(http://www.geolsoc.org.uk/template.cfm?name=Gakkel2\)](http://www.geolsoc.org.uk/template.cfm?name=Gakkel2) for an example of a recent news item.

Officialdom

Other course requirements include class attendance. Anticipated absences from tests or the final exam should be handled in advance through the infirmary or Dean of Students. Unanticipated absences from the tests will be dealt with on a case by case basis and are likely to involve an additional project of some sort. Unanticipated absence from the final exam must be dealt with through the Dean of Students.

Cheating and plagiarism will not be tolerated and will be handled according to the rules of the University.

Please notify me of any modification/adaptation you may require to accommodate a disability-related need. You will be requested to provide documentation to the Dean of Students' Office, in order that the most appropriate accommodations can be determined. Specialized services are available on campus through Services for Students with Disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY.

The University calendar for the Spring 2002 Semester is available at <http://www.utexas.edu/student/registrar/01-02long.html#Spring> (<http://www.utexas.edu/student/registrar/01-02long.html#Spring>).

Highlights include:

The *last day to drop a course for a possible refund* is **January 30, 2002.**

The *last day to drop a course without academic penalty* is **February 11, 2002.**

The *last day to drop a course for academic reasons* is **March 25, 2002.**



Updated: