Historical Geology

Earth Sciences 102

Section: D100

Term: 2004 Fall

Instructor: James A. MacEachern

Discussion Topics: General:

EASC 102 is an introductory course that deals with the historical development of geological thought and the study of Earth history. It is highly recommended that the student successfully complete Physical Geology (EASC 101) or GEOG 111 prior to enrolling in EASC 102.

Course Topics:

1. Historical development of geological thought and of geological principles.

2. The significance of the "sedimentary archives".

3. Evolutionary theory and the nature of the fossil record.

4. The relationship of time and geology.

5. The Earth\202s dynamic crust and plate tectonic theory.

6. Historical development of the Earth. The course will concentrate on the changes the Earth has experienced from Precambrian time, through the Paleozoic, Mesozoic and Cenozoic Eras. The changes considered encompass global distributions of land and seas, mountain building episodes, glacial cycles, and the evolutiion of life.

Course Organization:

One 2 hour lecture and One 2 hour laboratory period per week.

Grading: 1. Written Laboratory Assignments: 25%

2. Mid-Term Theory Test 20%

3. Mid-Term Laboratory Test: 10%

4. Final Laboratory Test: 10%

5. Final Theory Test: 35%

Required Texts: Course Textbooks:

Levin, H.L. 2003. The Earth Through Time (7th Edition). Saunders College Publishing, 568p.(NOTE: the 6th edition (1999) is acceptable, but not ideal.)

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Course Laboratory Manual:

Brice, J.D., Levin, H.L., and Smith

Recommended Texts:

Materials/Supplies:

Prerequisite/Corequisite:

Notes: