

EVOLUTION AND LIFE HISTORY

Geology 1308, Fall 2007

1:00-4:50 Wednesday

131 Dedman Life Science

Instructor:

Dr. Louis L. Jacobs

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Office Hours: Monday, 11:00-12:00

Teaching Assistants:

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Office Hours: Tuesday, 1:00-2:00

Objectives:

To understand the diversity of life on Earth (as we can observe it now) as a function of the interaction of fundamental Earth processes with the biosphere. To utilize the geological record to evaluate the responsibilities of humans toward the environment and to future generations.

Methods:

An understanding of biological diversity requires an awareness of what that diversity encompasses. Therefore, most class sessions will be spent in the field, or at the zoo, aquarium, botanical garden, or natural history museum. Specific topics relating modern diversity to geological and evolutionary principles will be addressed each week. No text is required; however, **a \$100 class fee is required.**

We will meet in the classroom at 1:00 each Wednesday for a lecture, then proceed to a bus for the excursions listed on the syllabus. You **must** take the bus. Private vehicles will not be permitted for this course. We will return to the campus by 5:00.

Attendance:

Because of the structure of the class, attendance is mandatory. A missed class must be made up by writing a five page paper on the subject of the class period missed. A student missing three classes will be administratively dropped from the roll.

NO CELL PHONES OR NEWSPAPERS AT ANY TIME.

Class Assignments:

A short quiz may be given each week at the beginning of class. In the case of written homework, **assignments must be typed**. The assignments and quizzes will be graded as part of one of the regularly scheduled tests.

Grading:

Three exams will be given as shown on the syllabus. Make-up exams will be given as a final during the university scheduled time.

Grading scale:

A	93 or above	C	73 to less than 77
A-	90 to less than 93	C-	70 to less than 73
B+	87 to less than 90	D+	67 to less than 70
B-	80 to less than 83	D-	60 to less than 63
C+	77 to less than 80	F	below 60

Grades will stand as calculated; there will be no rounding up or down.

After grading, tests will be discussed in class, after which exam papers will be collected and recorded. Simple arithmetic errors in grade calculations can be corrected by the TA. All other issues of grading should be discussed with the instructor. **Specific issues or questions should be submitted by email.**

* Disability Accommodations: Students needing academic accommodations for a disability must first contact Ms. Rebecca Marin, Coordinator, Services for Students with Disabilities (214-768-4557) to verify the disability and establish eligibility for accommodations. They should then schedule an appointment with the professor to make appropriate arrangements. (See University Policy No. 2.4.)

* Religious Observance: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.)

* Excused Absences for University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity should be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. (University Undergraduate Catalogue)

Syllabus
Geology 1308 - Fall 2007

Aug	29	Introduction Darwinian and Molecular Evolution Phylogenetic Analysis, Cladistics, Homology
Sept	5	Phylogeny of the Vertebrates Dallas World Aquarium
	12	Exam 1
	19	Rock Cycle
	26	Structure and Origin of Earth Dallas Aquarium, Fair Park
Oct	3	Plate Tectonics, Rocks and Minerals Dallas Zoo
	10	Absolute and Relative Geologic Time, Paleomagnetism Lake Grapevine
	17	Exam 2
	24	Ocean Dallas Lake Grapevine
	31	Earth History, Extinction, Geologic Hazards Pinnacle Park
Nov	7	Economic Geology, Oil, Strategic Materials Dallas Museum of Natural History
	14	Climate Change Shuler Museum, SMU
	21	THANKSGIVING BREAK
	28	Exam 3
Dec	5	Review for Final Exam
	11	Exam 4, 8:00 AM – Final exam is cumulative and serves as make-up for missed tests.