

OXFORD COLLEGE OF EMORY UNIVERSITY

Syllabus for Desert Geology (Geology 100N)

Interim 2007

I. Organization:

Desert Geology is a course that combines a series of lectures and discussions on the Oxford College campus during the spring semester with the field portion of the course following in May. The course meets in the Video Conferencing classroom in the library from 6:30 – 8:30 on Wednesday nights. The on-campus component of the course provides background for the field experience. The discussions will center on investigations of and environments, organismic adaptations to the desert, the ecology of Big Bend National Park, and the geology of Big Bend National Park. The field portion is a true outdoor laboratory. It includes direct observations of the geology of Big Bend National Park and the ecological community of the Chihuahuan Desert in West Texas along the Mexican border. A number of field projects and evening seminars will round out the field experience.

Instructor: Dr. Stephen W. Henderson
Office Phone: (770) 784-8345

Office: 106 Pierce Hall, Oxford Campus
E-mail: shender@emory.edu

II. Goals for students enrolled in Geology 100N:

Geology 100N has been designed for either the environmental studies major or for a student who wants an interesting laboratory science course as part of their liberal arts education. As such, no prior background is assumed or necessary, just a desire to learn and an interest in the natural world. The key elements in this course are the development of observation skills and their use in understanding and using the scientific method. These elements will be introduced early in the semester and continue to be reinforced throughout the rest of the course. The students' observational skills will be developed through a series of exercises in the classroom and field.

An integrated study of a particular area is a perfect forum to bring in a number of other disciplines that support our understanding. Students will gain knowledge of the basic principles of geology, Earth history, and ecology. At the end of this course, through the study of the Chihuahuan Desert, the students will have gained an appreciation, not only for the desert, but also for the connections with other fields of study. They will understand how science works.

III. Required Materials:

Field Notebook that will not fall apart. No legal pads or spiral-bound notebooks. The hard-back composition books that can be obtained in the bookstore work very well.

IV. Attendance:

All students are expected to attend all of the scheduled evening sessions. Attendance will be taken. A student not having a valid excuse for missing class will have their final course grade reduced 5 points per absence. In addition, their participation grade will be affected. The laboratory portion of the course (i.e. the field trip) is required for a passing grade in the course.

V. Expectations:

Each student who participates in Geology 100N is expected to exhibit good manners, good will, and impeccable conduct throughout the course. Considerations of safety, reputation, and common decency warrant no tolerance of all forms of misconduct. Think before you act. The instructors determine what constitutes misconduct.

The use of intoxicants by students is covered by the conduct code of Oxford College and is therefore prohibited. Because this is a college course, all other aspects of the conduct and honor codes are in effect. For security and safety considerations, night hiking is not allowed. In addition, going out in the evenings by yourself is not allowed.

Conduct which reflects adversely on the group or the college can result in immediate dismissal from the course and failure. Any student dismissed on the field trip will not be allowed to continue with the group but will be taken (at the student's expense) to the nearest public transportation for the trip home. The college will not be responsible for furnishing travel home in such cases nor will tuition be refunded.

VI. Tuition for this course is extra. The tuition rate is for a four-hour summer school course, which is \$3100.00. Students will be billed for this tuition. Courtesy scholarships cover this tuition. In addition to tuition, each student will need to bring approximately \$300.00 for food and spending money on the field trip. Don't depend upon ATM machines because they are not everywhere that we are going.

VII. Course Evaluation:

Lecture quiz (March 21)	10%
Lecture Test (April 25)	20%
Identification quiz (on field trip)	10%
Written journal of field trip	30%
Participation in discussions, learnlink conference, and field trip	20%
Attitude	10%

The **lecture quiz and lecture test** will consist of short essays, combined with objective multiple choice and matching questions.

The **journal** will include field notes and notes from evening seminars. A narrative of the day's events to be written nightly while the material is still fresh will supplement it. The journal must reflect a very accurate record of the course and include group activities as well as personal scientific observations and sketches. It must be neat and legible. The completed journal will be given to Dr. Henderson upon arrival back in Oxford and will be available for later pick-up after the grades have been recorded.

Class participation includes the classroom, the on-line conference, and the field trip. Asking questions and generally being an active learner are some of the ways to gain much from the course and receive the high participation grade that you deserve.

The **attitude grade** includes conduct, promptness, consideration of others, manners, willingness to help, and in general, being a good member of the group. On a field trip such as this, group dynamics become very important for the enjoyment of the course and the learning environment. We appreciate it!

VIII. Grading System:

Geology 100N will use the plus-minus grading system as follows:

A	93-100	C+	77-79
A-	90-92	C	73-76
B+	87-89	C-	70-72
B	83-86	D+	67-69
B-	80-82	D	60-66
		F	<60

IX. Evening Schedule – Attendance is mandatory.

Topic

Feb. 7	Introduction to course Climatological origin & classification of arid regions
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Feb. 14	Climatological aspects of arid regions and adaptations by organisms to their environment
Mar 7	Geomorphology of arid regions
Mar 21	Quiz over previous material. Ecological zonation of Big Bend National Park
Apr 11	Geologic history of Big Bend National Park
Apr 18	Geologic history, part 2
Apr 25	Lecture Test

X. Itinerary for Desert Geology (Geol 100N) May 2007

Origin and Termination: Oxford College Campus. The director of the program has arranged for transportation and motel accommodations.

Date	Activities	Lodging
14 May (Mon)	Drive from Oxford, GA to Vicksburg, MS. Geologic tour of Vicksburg Battlefield (430 miles)	Holiday Inn 4330 Frontage Rd. Vicksburg, MS 39183 Ph# (601) 634-8777/800 465-4329
15 May (Tues)	Drive from Vicksburg, MS to Abilene, TX (530 miles)	La Quinta Inn 3501 West Lake Rd. Abilene, TX 79601 Ph# (915) 676-1676/ 800 531-5900
16 May (Wed)	Drive from Abilene to Big Bend National Park Tour Monahans Sand Dunes (350 miles)	Chisos Mountains Lodge Big Bend National Park, TX 79834 Ph# (432) 477-2291
17 May (Thurs)	Tour eastern side of Big Bend National Pk including Panther Junction, Dugout Wells, Hot Springs, & Boquillas Canyon	Chisos Mountains Lodge
18 May (Fri)	Tour western side of Big Bend National Pk including Santa Elena Canyon, Tuff Canyon, & Blue Creek Line Camp	Chisos Mountains Lodge
19 May (Sat)	Hike in the Chisos Mountains including Lost Mine Trail	Chisos Mountains Lodge
20 May (Sun)	Hike in the Chisos Mountains including Window Trail & optional trip to Terlingua and the famous Starlight Theatre	Chisos Mountains Lodge
21 May (Mon)	Rafting through Santa Elena Canyon on the Rio	Chisos Mountains Lodge

Grande. Meet guides from Farflung Adventures in Terlingua.

22 May (Tues)	Drive from Big Bend to Seguin, TX Tour of Alamo & dinner in San Antonio prior to arriving in Seguin (450 miles)	Holiday Inn 2950 N. 123 Bypass Seguin, TX 78155 Ph# (830) 372-0860/ 800 465-4329
23 May (Wed)	Drive from Seguin, TX to Baton Rouge, LA (417 miles)	La Quinta Inn 2333 South Acadian Thruway Baton Rouge, LA 70808 Ph# (225) 924-9600
24 May (Thurs)	Drive from Baton Rouge, LA to Oxford, GA (563 miles)	Home

XI. Items needed for the Big Bend Trip:

1. Necessities:
 1. Clothing for eleven (11) days, to include:
 - a. Raincoat, or inexpensive poncho
 - b. Light jacket or sweatshirt
 - c. Cap or hat (very important)
 - d. Denim slacks
 - e. Hiking socks
 - f. Shoes or boots suitable for walking
 - g. Bathing suit and shoes for rafting
 2. Notebook and pen or pencils, plus relevant books, maps, etc.
 3. Flashlight and fresh batteries
 4. Canteen (very important)
 5. Sunscreen (very important)
 6. Bandanas for your neck
2. Suggested:
 1. Binoculars
 2. Camera
 3. Pocket knife