

GEOL 4311 – Field Methods
Dr. Steven J. Rosscoe (srosscoe@hsutx.edu)

Class Meets: M, 1:00 pm – 4:00 pm
Class Room: Sid Richardson 232

Office: Sid Richardson 206
Phone: (325) 670-1387

Office Hours:

Mondays and Fridays: 9 am – 10 am & 11 am – 12 pm
Tuesdays and Thursdays: 9 am – 10:30 am
Wednesdays: 9 am – 10 am & 11 am – 12 pm & 1 pm – 2 pm

Required Materials:

The Geoscience Handbook: AGI Data Sheets by J. Douglas Walker and Harvey A. Cohen, 4th Edition
The Mapping of Geologic Structures by Ken McClay, 1st Edition
Environmental Bound Book (4 ¾ inch X 7 ½ inch, Rite in the Rain Field Notebook) Poly Cover
Item Number 550 at www.riteintherain.com
Rock Hammer, Hand Lens, and Pocket Knife (Swiss Army is the best)
Optional Digital Camera

Course Description:

This course is designed to provide students with instruction and practice in the methods used by geologists in the field. Students will be exposed to a variety of geological and surveying tools and methods throughout the course. The culminating project for the course will be a geologic map of a local quadrangle.

Expected Learning Outcomes:

- Learn how to read and interpret topographic maps.
- Learn how to read and interpret geologic maps.
- Map rock exposures on topographic base maps.
- Learn a variety of field techniques (including strike and dip).
- Apply in class instruction in field methods to actual field situations.

Assessment of Expected Learning Outcomes:

Student success in completing the ELOs for the course will be evaluated through formal assessment methods (graded assignments) and informal methods (class discussion and field observation).

The Course Grade:

The course grade will be determined by student success in completing the following tasks throughout the semester. Attendance (300 points), Assignments (300 points), and Final Project (300 points) grades will be used to calculate the overall grade for the course. Description of each of the components of the course can be found on the next page of the syllabus.

A = > 90.00%	B = 80.00%-89.99%	C = 70.00%-79.99%	D = 60.00%-69.99%	F = < 59.99%
(≥ 900 points)	(800 – 899 points)	(700 – 799 points)	(600 – 699 points)	(≤ 599 points)

Note: The total number of points may vary based on changes to the course schedule throughout the semester, but the percentages will remain the same.

Attendance – As this is a field- and methods-based course attendance to all scheduled classes and field trips is mandatory. Failure to attend classes and field trips will adversely affect your grade. One third of your attendance grade comes from class attendance, one-third from department field trip, and one third from the three required Saturday field trips.

Assignments – Most class periods will have an assignment associated with them. These assignments are due at the start of the next class period (I will formally announce the due date for each of the assignments when they are given). These assignments will predominantly be field-based, as many class periods will be spend out in the field.

Final Project – The final project for the course will be a geologic map of two local quadrangles (the field work for which will be accomplished on our Saturday field trips) and a detailed geological report to accompany your final map product. Due May 3rd, 2010, by 4 pm.

Course Schedule:

<i>Date:</i>	<i>Topic:</i>	<i>Chapter:</i>
01/11/2010	Introduction – Field Studies – Field Equipment	McClay 1, 2
01/18/2010	<i>No Class – Martin Luther King Jr. Day – University Wide</i>	NA
01/25/2010	<i>No Class – Abilene Geological Society Short Course</i>	NA
02/01/2010	Reading and Interpretation of Topographic Maps	McClay 2, 9
02/08/2010	Rock Identification in the Field	AGI 6, 9, 10
02/13/2010	FIELD DAY # 1	Field Pack
02/15/2010	Measuring Orientations	McClay 4-7
02/22/2010	Measuring Strike and Dip	McClay 3-7
02/25-27/2010	GEOLOGY DEPARTMENT FIELD TRIP	Field Pack
03/01/2010	Mapping Locations and Distances	Handouts
03/06/2010	FIELD DAY # 2	Field Pack
03/08/2010	Mapping Elevations 1	Handouts
03/15/2010	<i>No Class – Spring Break – University Wide</i>	NA
03/22/2010	Mapping Elevations 2	Handouts
03/27/2010	FIELD DAY # 3	Field Pack
03/29/2010	Reading and Interpretation of Geologic Maps	McClay 2, AGI 2
04/05/2010	Using Aerial Photography in Mapping	Handouts
04/12/2010	<i>No Class – South-Central GSA Meeting, Branson, Missouri</i>	NA
04/19/2010	Writing Field Reports and Preparing Maps	Handouts
04/26/2010	Project Period	Field Pack

University Policies:

Academic Integrity Policy

Please refer to the Academic Integrity Policy found on pages 34-35 of the 2009-2010 *Undergraduate Catalog* and on pages 39-41 in the 2008-2009 *Student Handbook*, which is now on the HSU website. The student should become familiar with the policy and its terms. The policy applies to all assignments and tests in this class.

Attendance Policy

For class attendance policy, refer to the Attendance Policy found on pages 32-33 of the 2009-2010 *Undergraduate Catalog*. “Accordingly, absence from more than 25 percent of class meetings and/or

laboratory sessions scheduled for a course (including absences because of athletic participation) is regarded as excessive, and a grade of F may be assigned as deemed appropriated by the professor.” Excused absences are still counted in the total number of absences. The fact that an absence is excused means only that the student has the opportunity to make up the work missed during the absence without penalty to his/her grade. It is the responsibility of the student to make arrangements with the professor to complete the work in a time frame agreeable with the professor. Additional specific policies might be included in individual class settings by the professor.

University Policy on Students Regarding Disabilities

Any student with a professionally diagnosed learning disability and/or other professionally diagnosed disability that may affect course performance may choose to seek accommodation. If so, the student has the responsibility to notify the Office for Students with Disabilities of such at the beginning of the semester. Notification must be given during the first week of classes. This will allow time for documentation of the disability through the HSU Office for Students with Disabilities and for discussion of legitimate alternate means by which the student will be successful in the course. (Phone # 670-5842, Moody Center Room 214, Coordinator for Students with Disabilities: Mrs. Kaci Murphy)

University Policy on Cell Phones and Beepers in Class

“Use of electronic devices in the classroom is permitted only with consent of the instructor. Disruption of class by the sounds of cell phones and paging devices is forbidden. A student facing the possibility of receiving an emergency message by one of these means may leave the device turned on during class, but the student must inform the professor of that possibility at the beginning of class. Unless facing an emergency call, the student must turn the device off at the beginning of class and turn it back on only after the class has been dismissed. Routine work-related calls are not considered emergencies nor are personal calls from friends or business associates.” 2008-2009 *Student Handbook* page 38.

Official University Communication

The official avenue for the University, its faculty and offices to communicate with students is the students’ HSU email address. It is the responsibility of the student to check his/her HSU email address regularly for official university communication. Failure of the student to regularly check his/her HSU email address will not excuse the student from his/her responsibility for complying with any actions indicated in the university emails.

Important Dates:

January 11, 2010: Classes begin

January 18, 2010: Martin Luther King Jr. Holiday

January 19, 2010: Last day to Register or change Classes, last day to change from Credit to Audit, Last Date to Drop a Class with a Full Refund (This does not apply to a student who withdraws from school.)

February 15, 2010: Last day to Drop a course with a grade of W. Last date to file a Diploma Card for May Graduation.

March 15-19, 2010: Spring Break

March 24, 2010: Mid-semester Progress Reports for Freshmen

April 19, 2010: Last date to Withdraw from a course.

May 3-6, 2010: Final Exams