GENERAL INFORMATION

GEOLOGY 303, SPRING SEMESTER, 2008

Geology Building 2.324, the Boyd Auditorium

Lecture section 1: MW 2→3 p.m. (unique numbers 26225 through 26275)
Lecture section 2: TTh 11→12 noon (unique numbers 26165 through 26215, and 26280)
Each unique number corresponds to a unique combination of lecture and lab meeting times.

Professors: Leon E. Long, Geology Building 4.156
Office hours: MW 9→10, TTh 10→11, or by appointment
Office phone: 471-7562
Home phone: 459-7838
e-mail: leonlong@mail.utexas.edu

Jenny Cooke, Geology Building 4.142
Office hours: MW 1→2, TTh 2→3, or by appointment
Office phone: 471-1177
Home phone: 789-8618
e-mail: mcooke@mail.utexas.edu

Drs. Long and Cooke take turns lecturing to both lecture sections.

Textbook and lab manual (combined into a single volume): Long, L. E., 2007, *GEOLOGY*: 13th ed., Pearson Custom Publishing, 598 pages.

Website: We invite you to visit the GEO 303 website: http://www.geo.utexas.edu/courses/303/

Lab: You are already registered to attend one 2-hour laboratory session per week in Geology Building 2.306. Participation in laboratory is required in order to pass the course. There will be no labs during the first several days of class. **Labs begin on Tuesday, January 22**.

Weights assigned to grades:	1st quiz	17%
	2nd quiz	18%
	Laboratory grade	35%
	Lecture final exam	30%
		100%

Assignment of final grade: The grades will be curved, but the boundaries between letter grades are determined by the instructors' judgment and are different every semester. Typically the *A*/*B* boundary is in the upper mid-80s, the *B*/*C* boundary is in the upper mid-70s, the *C*/*D* boundary is in the upper mid-60s, and the *D/F* boundary is in the upper mid-50s. All of these estimates are approximations and may vary a point or so according to class performance**.**

Absences: Drs. Long and Cooke take an understandably dim view of unexcused absences from quizzes. Unexcused absences generally will result in a grade of zero. Please contact one of the instructors as soon as possible if you have missed a quiz for a legitimate reason.

Students with disabilities: Upon request, UT provides appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259 or 471-4641, or see the web site: http://deanofstudents.utexas.edu/

Objectives of GEO 303

GEO 303 is a one-semester survey of the entire field of geological science. We recognize that you probably have had no formal instruction in geology. Polls show that nearly all of you have taken high school biology, 75% or more have had chemistry, and nearly as many of you have taken physics. We will draw upon certain elementary concepts in these other sciences, and they will be reviewed when they are discussed in GEO 303. Mathematics in this course consists of simple arithmetic.

Geology draws heavily from these other disciplines. The earth is complex and not many aspects of it can be studied in isolation in a laboratory. This very complexity means also that geology includes a greater variety of subject material than many other sciences have. We may classify the subject of geology into three main areas: the *configuration* of the earth (the shapes, sizes, and compositions of its parts), the *processes* that constantly change the configuration, and the *origin* and *history* of the earth. GEO 303 treats all of these categories, emphasizing one or another of them differently along the way. The lectures present the more theoretical subjects, and in lab you will have opportunity to look at minerals, rocks, fossils, and maps, go into the field locally in Austin, and hold discussions as part of a small group.

In addition we invite you to participate in two optional activities. They are a one-day field trip west of Austin to visit the Llano Uplift, scheduled for Saturday, February 23, and a brown-bag lunch discussion (time to be announced) about how geology fits into your larger philosophical or theological worldview.

SCHEDULE OF LECTURE TOPICS

Part I. *Introduction to the earth* (Chapters 1, 2, 3, 5, 7, 9, and 11)
- Origin of the solar system; the earth's constituent parts
- Chemistry of the earth; crystals and minerals
- Igneous, sedimentary, and metamorphic rocks
- Measurement of geologic time, earliest earth history

Part II. *History and development of life* (Chapters 12, 13, and 15)
- Origin of life
- Stratigraphy, fossils
- Processes of organic evolution
- Geologic history of vertebrate animals

Part III*a*: *Processes occurring at the earth's surface: geology and you* (Chapter 23)
- Streams, deltas, coasts

Part IV: *Geophysics, plate tectonics* (Chapters 16, 21, and 22)
- Earthquakes, seismic waves
- Deep interior of the earth
- Continental and oceanic crust, and the mantle
- Gravity, isostasy, origin of mountains
- Earth magnetism
- Physiographic features of the ocean basins
- Continental drift, plate tectonics

Part III*b*: *Processes occurring at the earth's surface: geology and you* (Chapters 24 and 25)
- Glaciers
- Past and future climates
- Geology of petroleum and natural gas
- Population, natural resources, looking to the future

Chapters 4, 6, 8, 10, 14, 17, 18, 19, 20, 26, and 27 are covered in lab.

LECTURES, READING ASSIGNMENTS, AND EXAMS

Material on	*Dates of lectures*	*Reading assignment*
Quiz 1	January 14 (or 15) through February 12 (or 13): 9 lectures	Chapters 1, 2, 3, 5, 7, 9, 11, and 12 through page 214

Wednesday, January 30. Last day to drop GEO 303 for a possible refund.

Saturday, February 23. All-day field trip (approximately 10 hours) to the Llano Uplift west of Austin. Transportation by air-conditioned bus equipped with restroom is **free**; participation is voluntary and all are invited. Also invited at a modest expense are guests who are not students in GEO 303 as long as bus space is available; priority goes to students registered for GEO 303.

Monday, February 18, 7:30 p.m., Geol. B. 2.324. **Review session** for Quiz 1; participation is voluntary.

Tuesday, February 19 (or Wednesday, February 20). **Quiz 1** covering first 9 lectures, and textbook chapters and pages mentioned above.

Material on	*Dates of lectures*	*Reading assignment*
Quiz 2	February 14 (or 18) through March 25 (or 26): 9 lectures	Remainder of Chapter 12, 13, 15, 23, and Chapter 16 through page 322

Monday, March 10 through Friday, March 14, **Spring Break Holiday** (no lectures or labs).

Monday, March 24. Last day to drop GEO 303 with a *Q* (= *Q*uit with no academic penalty) except for urgent and substantiated, nonacademic reason approved by your dean. Last day to change registration in GEO 303 from a letter grade to pass/fail, or the opposite.

Monday, March 31, 7:30 p.m., Geol. B. 2.324. **Review session** for Quiz 2; participation is voluntary.

Tuesday, April 1 (or Wednesday, April 2). **Quiz 2** covering lecture material *since* Quiz 1 (i.e., second group of 9 lectures) and corresponding portion of the textbook.

Material emphasized on final exam	*Dates of lectures*	*Reading assignment*
	March 27 (or 31) through April 29 (or 30): 9 lectures	Chapters 16 (pages 322 through 326), 21, 22, 24, and 25

Thursday, May 1, no lecture. This is necessary to make the MW and TTh lecture sections have the same number of lectures. Martin Luther King Day (Jan. 21) a University Holiday, falls on a Monday so that for the remainder of the semester, lectures are on Tuesday/Wednesday and on Thursday/Monday.

Monday, May 5, 10 a.m., Geol. B. 2.324. "Extended office hours" for questions and summaries of class topics; participation is voluntary.

LECTURE FINAL EXAMINATION

A special time and date will be arranged for the lecture final exam with **both lecture sections together**. This unified examination will **not** occur during a period designated in the Course Schedule for classes that meet TTh at 11 a.m. or MW at 2 p.m. We anticipate Thursday, May 8, 7-10 p.m. in a room to be assigned, subject to confirmation by the Office of Official Publications. We will offer an alternative exam if you have a scheduling conflict.

GEO 303 LABORATORY

Grade in laboratory

Laboratory sessions are conducted by Teaching Assistants (TAs), who are graduate students pursuing Masters or Ph.D. degrees in geological science. Performance in the laboratory accounts for 35 percent of your total grade in GEO 303. Grades from the lecture examinations and laboratory will be weighted together and calculated as *one* combined grade for the course. Thus you will either pass or fail the entire course, *not* the lecture or laboratory separately.

The 35 possible points in the laboratory will be distributed as follows:

- 33% on a laboratory mid-semester examination to be given during the week of Monday, March 3 through Friday, March 7.

- 32% on a laboratory final examination to be given during the week of Monday, April 28 through Friday, May 2.

- 35% on attendance, participation in discussions, and performance on exercises and short quizzes.

Homework assignments and short quizzes

Your TA has the option to conduct unannounced quizzes. There will also be homework assignments and discussion topics to prepare. Performance on such quizzes and exercises and participation in class constitutes 35% of your laboratory grade, or 12% of the course grade.

Make-up labs, late papers

If for any reason you must miss a laboratory session, there will be no make-up laboratory as such. Your laboratory TA teaches more than one section, and if she or he is willing, you may make arrangements with your TA (or another TA) to attend a later section in which the same material is being taught.

Homework assignments will not be accepted late. Their solution will be discussed when they are turned in, and therefore persons who submit late papers would have an unfair advantage.

Office hours, problems

Each TA will maintain office hours this semester, and will notify you of office hours and room location. If you should have problems in laboratory that cannot be handled by your Teaching Assistant, you should contact:

Prof. Leon Long
Office phone: 471-7562
e-mail: leonlong@mail.utexas.edu

GEO 303 on the web: Blackboard, web site, and eGradebook

Note: the discussion below is full of computer jargon. Please ask Dr. Long or Dr. Cooke to explain any unfamiliar terms.

Course Web Site to access: http://www.geo.utexas.edu/courses/303/
We have a "public" GEO 303 web site accessible to the entire world. This site holds general information and material related to the lab, and it is also linked within Blackboard.

UT Direct to access: https://utdirect.utexas.edu/
To access eGradebook, you must first access UT Direct via your UT-EID.

- Web browser: (freely available from Bevoware or from producers' web sites)
  Internet Explorer 5.2 or higher, or Safari 2.0 or higher for Macintosh
  Internet Explorer 6.0 or higher for Windows
  Netscape Navigator 4.7 or higher
- UT-EID (*E*lectronic *ID*entification—what you use to access UT Direct)

Blackboard We also post material to Blackboard, a UT supported computer-based course management system that is accessible *only* to those enrolled in GEO 303.

How to access Blackboard:

- Use a web browser to access: https://courses.utexas.edu/webapps/login
- You will be asked to provide your UT-EID and password.
- There will be a link for each course in which you are enrolled, including "08S INTRODUCTION TO GEOLOGY (all TTh unique numbers will be listed as 26165 and all MW unique numbers will be listed as 26225)." For more information on how to access and use Blackboard, see this web site: http://www.utexas.edu/cc/blackboard/tutorials/student/index.html
- You will need the ability to open, close, and save files and attachments, in particular a PDF reader (Adobe Acrobat Reader, which is free software)
- Also recommended is an e-mail account.

Uses of Blackboard in GEO 303:

Below are definitions and uses of the major subunits in the Blackboard facility.

- *Announcements* regarding logistics of GEO 303 (example, schedule of review sessions)
- *Syllabus* an electronic copy of this document
- *Faculty Information* how to contact the professors
- *Course Documents* where we post figures from class, copies of class handouts, etc. This is the most important domain in Blackboard. Among other things, we will post condensed lecture notes here immediately before each quiz and before the lecture final exam.
- *Discussion Board* where to raise questions related to GEO 303 (see rules for discussion next page)
- *Communication* tool to send course-related e-mails to classmates and instructors
- *eGradebook* link to eGradebook.

How to post to a discussion board:

- Click the discussion board button.
- You may read or add to an existing discussion by clicking on an existing "forum," and add a new "thread" to the discussion. You may post a message to the existing thread (this is difficult to explain in detail, but rather self explanatory if you try it).

Electronic Posting of Grades Exam, quiz, and laboratory midterm and final grades will be posted on eGradebook, which is part of the "Class Information Pages" or CLIPS, accessible from UT Direct. You can also access eGradebook from Blackboard and the GEO 303 course website. eGradebook

is password protected with your UT-EID and password such that your grades are available only to you and your instructors. The eGradebook web address is: https://utdirect.utexas.edu/diia/egb

Rules for Use of GEO 303 Blackboard Discussion Boards

Blackboard discussion boards are available to all GEO 303 students, TAs, and professors. Everyone can read anything that you post to a discussion board, and your identity, although encrypted in your user-name, ultimately cannot be concealed. In a sense you are a "public figure" to be held accountable for your words and actions. Thus, normal courtesy and civility are expected of everyone. Your peers will also think better of you if you think carefully about constructing good phraseology, spelling, and grammar before you send forth a message. Before posting a message, it would be a good idea to run it through a spelling checker.

The following uses of the GEO 303 Blackboard discussion and communication tools are FORBIDDEN:

- Dirty, obscene, or inappropriate jokes
- Anything that insults a person's race, gender, religious faith, or sexual orientation
- Reference to athletic teams or events
- Negotiation to buy or sell something
- Reference to social events (unless you would like to throw a party just for GEO 303 students)
- Appeals on behalf of any private or public do-good organization (religious, charity, fight against disease, etc.), no matter how worthy

The guiding principle here is that GEO 303 Blackboard discussion boards are meant *only* for the business at hand. The Computation Center endorses (and will enforce) the "no-no" list above. If you wish to indulge in something on that list, send a personal e-mail message. With adherence to these minimal requests, we hope that the GEO 303 Blackboard discussion boards will become an excellent forum by which you may seek help from your peers, TAs, and professors, or mentor others. You are welcome to ask questions, make comments, form study groups, whatever.

Address your message to the discussion board *only* if you intend for a large audience to read it. If your message is intended just for an individual, use e-mail instead.

Geology has important religious implications (origins, creation, organic evolution, etc.) and political implications (utilization of natural resources, minimizing pollution, etc.), and sometimes the GEO 303 discussion boards carry some highly opinionated exchanges. We welcome this! However, just as the United States Senate has learned through experience that it must have rules to limit debate, so must we. If someone violates the rules above, the message may be deleted and her/his privilege to post future messages on the board may be revoked at the discretion of Drs. Long and Cooke.

Access to Computers at UT

You do not have to own a computer to access the computer-based GEO 303 resources. All libraries and the SMF (Student Microcomputer Facility) have public computers for student use *for free*, but many require you to set up an IF (Individually Funded) account. Use of the computers via the IF account is free, but other services such as printing will be charged to your IF account.
To set up an IF account Subscribe online (using UT-EID) at this site:

https://utdirect.utexas.edu/its/account/user_agreement.WBX

Consult this site for more information: http://www.utexas.edu/its/account/index.html

Procedure to Obtain E-mail (if you do not already have an e-mail account)
Information may be found at this web site: http://www.utexas.edu/computer/email/
Your ITAC fees support **free** access e-mail for all students through the UMBS (University Mailbox Service). Consult: http://www.utexas.edu/its/umbs