

POLICY STATEMENT

GEOLOGY
--FALL 2008--

**DEPARTMENT OF GEOGRAPHY,
GEOLOGY AND PLANNING**

GLG 110 (LECTURE)
Physical Geology, Section B
MWF 1:00 – 1:50 PM, TEM 3
Office Hours: MW 2-3 PM; TR 1-2 PM

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GLG 110 Physical Geology. 4(3-2) F,S.

Partially fulfills the general education requirements in the natural sciences. The course is an introduction to the study of the earth. Topics include minerals and rocks; dynamic internal processes including volcanism, earthquakes, plate tectonics, mountain building, and surface processes such as erosion by streams, glaciers, and wind. A laboratory session is part of the course, although taken with a different instructor, and includes hands-on exercises in identification and classification of common minerals and rocks, and interpretation of topographic and geologic maps.

REQUIRED TEXTBOOK:

The Earth, by Lutgens and Tarbuck, ninth edition, 2008. **Please bring your book to class.**

Note: The book has an accompanying CD-rom that is an excellent tool for self-guided studying. Also, check <http://www.prenhall.com/tarbuck> for additional learning materials.

COURSE OBJECTIVES:

The purpose of this course is to introduce you to the various physical processes active inside the earth and on the earth's surface, as well as the understanding and appreciation of rocks, landscapes, and earth processes. It is also hoped that you will be able to respond intelligently to important human issues, which are in part dependent on the earth's geology and will in part shape man's future.

There are two **optional** field trips (there is a fee to pay for transportation): one day fieldtrip for looking at the stratigraphy of the area and fossil hunting on a Saturday and a weekend fieldtrip to the St. Francois Mts. of southeast Missouri. Exact dates will be provided later. Space is limited; please let me know two weeks ahead of time if you are interested in going. See section on Extra-Credit below.

COURSE POLICY:

SEATING: Your attendance will be taken by seat number. Make sure you choose a seat that is comfortable (you can see/hear well) and sit in the same place throughout the semester. Your attendance will be counted only if you attend the entire lecture. Attendance will be removed to those who leave before the class is over and those who sleep during class.

CLASS DISRUPTIONS: In a class this size it is easy for one person to disrupt a large number of people. Examples of disruption are cellular phones (please turn them off), i-pods, text messaging, newspapers, excessive talking during lecture or consistently arriving late for lecture or leaving before the class is over. If I don't see a disturbance, the people being bothered should let me know (either during or after the lecture) and I will see to it that the offender stops his or her disturbance.

DROPPING THE COURSE: In spite of what your peers tell you, nobody is automatically dropped for non-attendance. If you don't want an "F", you **must** go through the proper drop procedure. The deadline for dropping the class with N grade is Wednesday Oct 29th.

EXAMS: Exams serve two purposes in the GLG 110 lecture: (1) Exams evaluate a student's progress, and (2) Exams are used to insure students will review and integrate materials learned during the semester.

There will be a total of four exams given during the semester; each exam will be graded based on percentage (maximum = 100%). Exams 1 through 3 are spaced at regular intervals throughout the semester (see your syllabus for exam dates). Exam 4 will be taken during the two-hour final exam time. The lowest score from the first three lecture exams may be substituted by attendance (in percentage, see attendance policy below); however, exam 4 can not be substituted.

The grade you obtain in the post-test (a pre-test and post-test are used for course assessment purpose) may be incorporated as a fifth exam to boost your grade, but **only if this benefits you**.

GRADING: Lecture scores will be 67% of your final grade and laboratory scores will be 33%. Your lecture score will be normalized to 70% median, and will only be used if that will improve your grade. The grading scale used in this course is:

A = >90.0%, **B** = 80.0-89.9% **C** = 70.0-79.9% **D** = 60.0-69.9% **F** = 59.9% or less

MAKE-UP POLICY: Since the lowest of your first four exams can be substituted, there will be **absolutely no make-up** tests. If you miss a test, that will automatically be the attendance score. If, however, you know in advance that you must miss a test for a good reason (i.e. court appearance, trip with an athletic team, etc.) it may be possible for you to take the test in advance.

ENROLLING IN OUR BLACKBOARD (WEB) SITE

Enrolling in blackboard is highly recommended. Here you will find information about fieldtrips, course materials, to take optional quizzes (see Extra credit below) and see your quiz/exam grades.

Enrolling in GLG-110 Section B - Blackboard course site

At "My Missouri State" page,

1. Click the "**Courses**" tab to access the "Courses" area
2. Type GLG110 in the course search box, then click the "**GO!**" button
3. Find your course in the listing; click the "**Enroll**" button to the right of the course title.
4. Check the course information, and click the "**Submit**" button to add your name to the course site roster
5. Click "**OK**" to access your course

EXTRA CREDIT WORK: There will be weekly quizzes on blackboard that you can take on your own at <http://blackboard.missouristate.edu/>. If the combined points accumulated on your quizzes at the end of the semester amount to at least half of the total possible points, you will get 10 extra points to one of your exams (exams are worth 100 points each). Also, attending either one of the field-trips scheduled for this class will give you 10 points extra to any one of your exams. You are welcome to go on both fieldtrips, but only one will count as extra credit.

ATTENDANCE POLICY:

Student responsibility concerning attendance is stated on pages 56 in the 2007-08 University Catalog: "The University expects students to attend all class sessions of courses in which they are enrolled. Each instructor has the responsibility to determine specific attendance policies..."

In this class, attendance is not part of your grade. If the student is physically absent from the class or part of it, the student is absent on the record. **If you miss part of the class, it will count as absence.** Attendance can give you extra points, however. **The percentage attendance will also substitute your lowest grade (out of exams 1-3) if it benefits you. You can consider this as a "bonus" for good attendance.**

It is the student's responsibility, not the lecture's instructor; to be sure the student obtains missed material (even if the student had an official University absence slip) such as hand-outs or lecture notes. If you miss a class, please ask **a classmate** for missed hand-outs and/or lecture notes.

ACADEMIC DISHONESTY:

Missouri State University is a community of scholars committed to developing educated persons who accept the responsibility to practice **personal and academic integrity**, see pages 53-54 of the 2007-08 University Catalog. Students caught cheating during (or after) an exam/quiz will get zero on it.

DISABILITY ACCOMODATION:

To request academic accommodations for a disability, contact the Director of Disability Services, Plaster Student Union, Suite 405, (417) 836-6792. Students are required to provide documentation of disability to Disability Services prior to receiving accommodations. Disability Services refers some types of accommodation requests to the Learning Diagnostic Clinic, which also provides diagnostic testing for learning and psychological disabilities. For information about testing, contact the Director of the Learning Diagnostic Clinic, (417) 836-4787, LearningDiagnosticClinic@missouristate.edu

Affirmative Action Policy: Missouri State University is an equal opportunity/affirmative action institution, and maintains a grievance procedure available to any person who believes he or she has been discriminated against. At all times, it is your right to address inquiries or concerns about possible discrimination to the Office of Equal Opportunity Officer, Siceluff Hall 296, (417) 836-4252. Other types of concerns (i.e., concerns of an academic nature) should be discussed directly with your instructor and can also be brought to the attention of your instructor's Department Head.

RELATIONSHIP BETWEEN INSTRUCTIONAL GOALS OF THE COURSE AND THE GOALS OF THE MSU GENERAL EDUCATION PROGRAM

GLG 110 (Principles of Geology) is a General Education course. The instructional goals of GLG 110 are related to the goals of the MSU General Education program as follows:

Instructional Goal #1. Teach the general education student how to identify and classify common minerals and rocks for the purpose of developing an understanding of their importance in the continued economic development of a prosperous society.

This instructional goal of GLG 110 relates directly to the following goals of the MSU General Education program: I.B.2, I.B.3, I.B.4, I.C.2, I.C.4, I.C.5, I.D.2, I.D.3, II.A.1, II.A.3, II.A.5, II.B.3., and II.B.5.

Instructional Goal #2. Teach the general education student to understand the role of dynamic internal earth processes such as volcanism, earthquakes, plate tectonics, and mountain building as they control the evolution of the earth's crust and the geographic distribution of natural resources.

This instructional goal of GLG 110 relates directly to the following goals of the MSU General Education program: I.B.2, I.B.3, I.B.4, I.C.2, II.A.1, II.A.3, II.A.4, II.B.4., and II.B.5.

Instructional Goal #3. Teach the general education student to recognize and interpret the role of surficial earth processes such as running surface water, ground water, glaciers, wind, and ocean waves and currents in the sculpting of the earth's surface.

This instructional goal of GLG 110 relates directly to the following goals of the MSU General Education program: I.B.3, I.B.4, I.B.5, I.C.2, I.C.4, I.D.2, I.D.3, II.A.1, II.A.3, II.A.4, II.A.5, II.B.4, and II.B.5.

Instructional Goal #4. Teach the general education student to read and use topographic contour maps to: a) determine the relative size and distance between features as represented at different scales, b) describe the location of features according to both latitude and longitude and the Congressional Land Survey System, c) locate drainage divides and determine stream gradients, and d) interpret the development of erosional and depositional landforms in both temperate and arid regions, with emphasis on the stream and groundwater (Karst) features predominant in the Ozarks region.

This instructional goal of GLG 110 relates directly to the following goals of the MSU General Education program: I.B.3, I.B.4, I.B.5, I.C.1, I.C.2, I.C.4, I.D.2, I.D.3, II.A.1, II.A.4, II.A.5, II.B.3., II.B.4, and II.B.5.

Tentative Weekly Schedule

| Week of | Chapters | Topics |
|-----------------------------------|------------|---|
| Aug 25, 27, 29 | 1, 3 | Introduction to Geology. Atoms, Elements, Minerals |
| Sep 3, 5 | 3 | Mineral ID, Mineral Uses, Mineral Classification |
| Sep 8, 10, 12 | 4, 5 | Igneous Rocks, Volcanic Activity |
| Sep 15, 17, 19 | 6 | Mechanical Weathering, Chemical Weathering |
| Sept 22, 24, 26 | 6, 7 | Soil Formation, Sedimentary Rocks |
| Sep 24 | | EXAM I (Chapters 1, 3, 4, 5, 6) |
| Sept 29, Oct 1, 3 | 7, 8 | Sedimentary Rocks, Metamorphic Rocks |
| Oct 6, 8, 10 | 8, 9 | Metamorphism, NMSZ (video), Geologic Time |
| Oct 13, 15 | 9, 11 | Absolute Dating, Earthquakes, Seismic Waves |
| | | <i>Fall Break</i> |
| Oct 20, 22, 24 | 12 | Earth's Interior |
| Oct 24 | | EXAM II (Chapters 6, 7, 8, 9, 11, New Madrid Earthquake) |
| Oct 27, 29, 31 | 12, 2 | Continental Drifting, Plate Tectonics |
| Nov 3, 5, 7 | 13, 14 | Ocean Floor, Origin of Mountains |
| Nov 10, 12, 14 | 10, 16 | Crustal Deformation, Running Water |
| Nov 17 | 16 | Drainage Basin, Drainage Patterns |
| Nov 19 | | EXAM III (Chapters 2, 10, 12, 13, 14, 16) |
| Nov 21 | 17 | Groundwater |
| Nov 24 | 17 | Groundwater contamination, Karst, |
| | | <i>Thanksgiving Holiday</i> |
| Dec 1, 3, 5 | 18, 21, 19 | Glaciers, Global Climate Change, Deserts |
| Dec 8 | 19, 20 | Deserts, Shorelines |
| Dec 10 | | Assessment |
| Wednesday Dec 17 (1:15 PM) | | FINAL EXAM (Chapters 17, 18, 19, 20, 21) |