

POLICY STATEMENT

GEOLOGY

DEPARTMENT OF GEOGRAPHY, GEOLOGY & PLANNING

GLG 171 – Environmental Geology
TTR-2:00-3:50
Temple 362

Dr. Kevin Mickus
Temple 375A-Office
Temple 355-Lab

OFFICE HOURS: MW 1:00-3:00, F 2:00-5:00
Or by Appointment

FALL 2011

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CATALOG DESCRIPTION:

GLG 171, Environmental Geology. 4(4-0) F,S.

Partially fulfills the general education requirements in the natural sciences. Treats aspects of geology interfacing with humanity. Geologic hazards, geologically related aspects of environmental health problems, mineral resources and energy resources. Human dependence of geologic resources is examined and interrelated with problems of humanity.

REQUIRED TEXTBOOK:

Living With Earth by Travis Hudson is required. You must bring your copy to class because I frequently refer to figures in the text during lecture.

COURSE OBJECTIVES:

After taking this course, students should be aware of the physical environment of Earth; how our planet works and how the physical world relates to the occurrence of natural resources and geologic hazards. A better understanding of these is vital for a better management of our resources, and in the case of hazards, development of sensible programs of prevention and mitigation. The course addresses both global and local issues, as well as controversial topics such as global warming, and nuclear energy.

The goal of this course is not to persuade you to become an activist but to foster your analytical and critical thinking skills and knowledge necessary for good citizenship. Finally, education is not “just the facts”. We will have plenty of facts to learn, but we will always want to go beyond the bare facts to the implications. What do these facts imply about the way nature behaves? What implications do they have for society? For public policy decisions? For future choices and lifestyles?

GLG 171 (Environmental Geology) is a General Education course. GLG 171 addresses several areas of MSU’s General Education Goals. Among these are Part I: Intellectual Abilities and Dispositions (Information-Gathering, Reasoning and Synthesizing Abilities, and Reflective, Creative and Critical Disposition), and Part II: Knowledge and Understanding (Knowledge and Understanding of the Natural World, and Understanding of

Culture and Society). The instructional goals of GLG 171 are related to the following goals (in parentheses) of the MSU General Education program:

- a. Recognize the variation in minerals and rocks and how they relate to geologic and environmental processes.
- b. Understand how and where mineral and energy resources are created, how they are found and the outlook for future scarcity/abundance (II.A.5)
- c. Understand how the basic structure and processes of the earth control the location and severity of earthquakes and volcanoes.
- d. Understand the hydrologic cycle, and to predict the statistical risks pertaining to frequency and severity of flooding, and to recognize how public policies may contribute to the severity of flooding (II.A.2, II.A.5).
- e. Understand how coastal processes, and zoning/regulation can interact to affect both safety and economic prosperity along a coastline (II.A.5, II.B.4, II.B.5).
- f. Recognize where urbanization and building should be avoided to prevent damage from subsidence and unstable land surfaces (II.B.5).
- g. Identify various soil groups, rank them in their potential for degradation by erosion, and to suggest suitable agricultural and nonagricultural uses (II.A.4, II.A.5).
- h. Describe how geologic processes affect broad environmental issues such as the greenhouse effect and acid rain, and how scientific investigations may eliminate unsound policy proposals relating to these problems. (II.A.3, II.A.4, II.A.5, II.B.5)
- i. Understand how we can treat and dispose of waste materials without polluting the environment in which we live (II.A.4, II.A.5, II.B.5)
- j. Recognize the similarities and connections between public policies which have led to widespread environmental damage (II.B.4, II.B.5)

Class Assessment: The success of this section in meeting the General Education goals for this class will be assessed by a comparison of pre and post-test question results, as well as a class survey during the final exam period.

COURSE REQUIREMENTS:

DROPPING THE COURSE: It is your responsibility to understand the University's procedure for dropping a class. If you stop attending this class but do not follow proper procedure for dropping the class, you will receive a failing grade and will also be financially obligated to pay for the class. For information about dropping a class or withdrawing from the university, contact the [Office of the Registrar](#) at 836-5520.

MAKE-UP POLICY: If 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 (please note: this is not an iron clad guarantee of taking an exam early, you must have a good reason; wanted to leave town a day or two early to extend your thanksgiving vacation is not considered a good reason). In this case, you must see me well in advance (one week) and be prepared to substantiate your reason for missing the scheduled test. There will be absolutely no make-up tests given after the fact. **NOBODY CAN TAKE THE FINAL EARLY.**

EXTRA CREDIT WORK: There is no extra credit work allowed in this class, please do not ask.

GRADES:

EXAMS: There will be five exams. Four of these exams will be given during regularly scheduled class periods; the fifth will be given during Finals Week. Each of the exams will cover material since the last exam (or beginning of class for exam 1) and will be some combination of multiple choice, matching and short answer. The attached schedule lists the **tentative (missing a test because you missed class when the test date changed is not an excuse)** dates for the exams. Dates may change as the semester progresses. In any event, test dates will be announced at least one week in advance. Exam questions will be based upon material from the lectures, textbook, reading material, homework and any class handouts. The final exam will consist of multiple choice questions on material since the last exam.

WRITING ASSIGNMENTS: Writing assignments will be given on readings handed out in class. Assignments will consist of reviewing the articles and answering specific questions. The writings will be graded based on clarity, spelling, English grammar, analysis of the given article, and originality. The writings will due one week after they are handed out. Assignments turned in one day late will be penalized by 50%, after one week no points will be given for that assignment.

HOMEWORK: This will consist of in class assignments such as identifying minerals, inter-pretng contour maps, and analyzing groundwater contamination. Homework will be due one week after they are assigned. Assignments turned in one day late will be penalized by 50%, after one week no points will be given for that assignment.

GRADING: The median score for each exam will be calculated. If the median is below 70%, the score of each student will be adjusted upward until the class median reaches 70%. Scores that fall more than three standard deviations below the mean and scores for the students who were absent more than 25% of the class periods will not be included in the calculation of the median. Under no circumstances will the final exam be substituted.

No make up exams will be given. If you miss an exam, no matter the reason, your grade will be 0 for that exam. The lowest score from the first four exams may be substituted by attendance (in percentage, see attendance policy below); however, **exam 5 can not be substituted.** You must take exam 5 which is the final exam.

Each exam is worth 18% of your total grade. The homework and writing to learn assignments are worth 5% each. **Final grades** will be given on the +/- system: 92.50%-100.00% -- A, 90.00%-92.50% -- A-, 87.50%-89.99% -- B+, 82.50%-87.50% -- B, 80.00%-82.50% -- B-, 77.50%-79.99% -- C+, 72.50%-77.50% -- C, 70.00%-72.50% -- C-, 67.50%-69.99% -- D+, 60.00%-67.50% -- D, 0.00%-59.99% -- F

Please keep track of all your grades, so that you can figure out your grade any time you wish. **I will not figure your grade for you during the semester.**

GENERAL MATERIAL

ATTENDANCE POLICY

Attendance will not be used in determining grades. On the first day of class, faculty must provide students with a written statement of the specific attendance policy for that class. The instructor has the responsibility to determine specific attendance policies for each course taught, including the role that attendance plays in calculation of final grades and the extent to which work missed due to non-attendance can be made up. For GLG 171, attendance will be taken but will be counted against your grade. **Instructors are not allowed to let students use their lecture notes.**

If the student is physically absent from the class or part of it, the student is absent on the record. Explanation of an absence and acceptance thereof by the instructor shall not be construed to excuse the student from any work or test. **Additionally, the use of a cell phone in class for any reason (texting, talking or just looking at it for texts) will cause you to lose your attendance for that day.**

The percentage attendance is not a required part of your grade, so any excuse (school or nonschool event) will allow you to count the absence as being in class. Your percentage attendance will substitute your lowest grade (out of exams 1-4) if it benefits you. You can consider this as a "bonus" for good attendance.

DISABLED STUDENTS

Students who require assistance during an emergency evacuation must discuss their needs with their professors and Disability Services. If you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. For additional information students should contact the Office of Disability Services, 836-4192 (PSU 405), or Larry Combs, Interim Assistant Director of Public Safety and Transportation at 836-6576. 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.

NONDISCRIMINATION

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 for Equity and Diversity](#), Park Central Office Building, 117 Park Central Square, Suite 111, (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. Please visit the OED website at www.missouristate.edu/equity/.

EMERGENCY RESPONSE PLAN

For further information on Missouri State University's Emergency Response Plan, please refer to the following web site: <http://www.missouristate.edu/safetran/erp.htm>
Students who require assistance during an emergency evacuation must discuss their needs with their professors and Disability Services. If you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible.

For additional information students should contact the [Office of Disability Services](#), 836-4192 (PSU 405), or Larry Combs, Interim Assistant Director of [Public Safety and Transportation](#) at 836-6576.

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. You are responsible for knowing and following the university's student honor code, *Student Academic Integrity Policies and Procedures*, available at www.missouristate.edu/assets/provost/AcademicIntegrityPolicyRev-1-08.pdf and also available at the Reserves Desk in Meyer Library. Any student participating in any form of academic dishonesty will be subject to sanctions as described in this policy.

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 Equity and Diversity, 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, Dr. Thomas Plymate tomplymate@missouristate.edu.

DISABILITY ACCOMMODATION

To request academic accommodations for a disability, contact the Director of [Disability Services](#), Plaster Student Union, Suite 405, (417) 836-4192 or (417) 836-6792 (TTY), www.missouristate.edu/disability. 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, <http://psychology.missouristate.edu/ldc>.

POLICY ON USE OF CELL PHONES IN CLASSES

As a member of the learning community, each student has a responsibility to other students who are members of the community. When cell phones or pagers ring and students respond in class or leave class to respond, it disrupts the class. Therefore, the Office of the Provost prohibits the use by students of cell phones, pagers, PDAs, or similar communication devices during scheduled classes. All such devices must be turned off or put in a silent (vibrate) mode and ordinarily should not be taken out during class. Given the fact that these same communication devices are an integral part of the University's emergency notification system, an exception to this policy would occur when numerous devices activate simultaneously. When this occurs, students may consult their devices to determine if a university emergency exists. If that is not the case, the devices should be immediately returned to silent mode and put away. Other exceptions to this policy may be granted at the discretion of the instructor.

Sanctions for violation of this policy are determined by the instructor and may include dismissal from the class—see Class Disruption (<http://www.missouristate.edu/registrar/classdis.html>).

In testing situations, use of cell phones or similar communication devices, or any other electronic or data storage device for other than university emergencies, may lead also to a charge of academic dishonesty and additional sanctions under the *Student Academic Integrity Policies and Procedures* (<http://www.missouristate.edu/assets/provost/AcademicIntegrityPolicyRev-1-08.pdf>).

There are two appeal processes available to students. A sanction for class disruption may be appealed using the appeal process stated in the Class Disruption policy; however, a violation that involves a charge of academic dishonesty must be appealed using the process described in the *Student Academic Integrity Policies and Procedures*.

STUDENT RESPONSIBILITIES

Obtaining Notes/Handouts for Missed Lectures: If you miss a lecture, it is your responsibility to obtain notes/handouts from some other class member. Professors are not allowed to distribute copies of their notes to students, or to offer personalized make-up tutorials, so please do not ask.

Seeking Extra Help: It is your responsibility to seek additional help in understanding the course material before irreparable damage is done. I am happy to answer your questions and provide additional help during my office hours or any other mutually convenient time. However, it is your responsibility to prepare for this additional help by thoroughly reading the assigned material and carefully reviewing class notes before going to my office so that you can ask specific questions on the material which has not been understood. If I ask “What don't you understand?” and you answer “Everything”, then you have not prepared adequately to take advantage of the additional help.

Class Disruptions: It is easy for an individual to disrupt and disturb a large number of people. Instructors at MSU have authority to suspend or drop any student who disrupts a class. Examples of disruptions include: 1) excessive talking or joking during class; 2) consistently

arriving late for class; 3) leaving class early (without notifying the instructor); 4) texting or using a cell phone and 5) rustling of papers, books etc.

PROBLEMS: If you foresee or experience any problems during the course, please come and see me **as early as possible**. I am easy to reach by phone or by e-mail. If you cannot get a hold of me, please contact our secretary at 836-5800. She will be able to find me.

TENTATIVE LECTURE AND EXAM SCHEDULE GLG 171
(subject to change, which will be announced in class)

LECTURE	Approximate number of lectures
Introduction to Course	1
Chemistry, Minerals and Rocks	3
Plate Tectonics	1
EXAM I (week of 9/12)	
Earthquakes	2
Volcanoes	2
Soils	1
EXAM II (week of 10/3)	
River Systems	2
Flooding	1
Groundwater	2
EXAM III (week of 10/27)	
Water Quality including Waste Management	2
Karst and Topographic Maps	2
Landslides	2
Exam IV (week of 11/28)	
Mineral Resources	2
Fossil Fuels	2
Optional Topics	1

FINAL EXAM December 13, 1:15-3:15 pm