

POLICY STATEMENT

GEOLOGY

DEPARTMENT OF GEOGRAPHY, GEOLOGY & PLANNING

GLG 597 – Global Tectonics
TTH- 5:00-6:15

Dr. Kevin Mickus
Temple 375A

OFFICE HOURS: MW 1:00-2:00, F 2:00-5:00

Spring 2010

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CATALOG DESCRIPTION:

GLG XXX, Global Tectonics. 3(3-0) S.

Prerequisite: GLG 314. The fundamental basis of plate tectonics. Topics covered include geophysical methods, plate motion theory, fundamental properties of plate boundaries, formation of sedimentary basins and orogenic belts.

REQUIRED TEXTBOOK:

Global Tectonics by Keary and Vine, 3rd ed. is required. I recommend that you bring your copy to class because I frequently refer to figures in the text during lecture.

COURSE OBJECTIVES:

Plate tectonics is the fundamental theory of how the Earth works. While the theory is generally accepted by earth scientists, there are still many controversial aspects of the theory. Through reading of the textbook, journal articles, and lectures, the student will be able to understand the general structure of the Earth and how this fits into the plate tectonic theory, how plates move, and how their interaction causes the various geological features (e.g., faults, orogenic belts, sedimentary basins) on the Earth.

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.

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

GRADES:

EXAMS: There will be three exams. Two 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). The exam are worth 100 points each and may consist of multiple choice, fill-in-the-blank, short answer and essay. Exam questions will be based upon material from the lectures, textbook, reading material, homework and any class handouts. There are no makeup exams.

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 assignments such as analyzing earthquakes, interpreting magnetic stripe patterns and determining motion on a sphere. 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. The combination of the homework and writing assignments will be 100 points.

ORAL PRESENTATION/TERM PAPER: An eight-ten page double-spaced term paper (does not include cover sheet, there must be at least 3 journal references) will be written by each student on some regional area of tectonics (e.g., Alpine orogeny, East Africa Rift). Each student will also prepare a 15-20 minute presentation on the subject of the term paper. The term paper is worth 100 points and the presentation is worth 100 points.

GRADING:

There are a total of 600 points from the above assignments. Final grades will be given on the new +/- 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 or for your grade. **Instructors are not allowed to let students use their lecture notes.**

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.

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>

ACADEMIC INTEGRITY

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 .

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); and 4) 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 XXX
(subject to change, which will be announced in class)

LECTURE	Approximate number of lectures
Introduction to Course	1
History of Plate Tectonics	2
Mechanisms of Plate Tectonics	1
Continental Drift	1
Geophysics –Seismology	1
Geophysics- Magnetism and Gravity	1
Structure of the Earth	2
Mantle Plumes	1
Archean Tectonics	1
Cratons	1
Continental Rifting	1
 EXAM I	
Oceanic Spreading Centers	1
Subduction Zones	1
Island and Back Arcs	1
Transform Boundaries	1
Exotic Terranes	1
Formation of Sedimentary Basins	1
Foreland Basins	1
Orogenic Belts	2
Neotectonics	1
 EXAM II	
Africa	1
Antarctica	1
Asia	1
Europe	1
North America	1
North America	1
South America	1
Australia	1
 FINAL EXAM	

FINAL EXAM May 13, 5:45-7:45