

## POLICY STATEMENT

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### GEOLOGY

### DEPARTMENT OF GEOGRAPHY, GEOLOGY & PLANNING

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**GLG 590** - Applied Geophysics  
TTH-6:00-7:15pm  
Temple 335

Dr. Kevin Mickus  
Temple 375A

**OFFICE HOURS:** MW 1:00-3:00, F 2:00-5:00

**FALL 2010**

**OFFICE PHONE: 836-6375**

**Email: kevinmickus@missouristate.edu**

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### CATALOG DESCRIPTION:

**GLG 590 Applied Geophysics.** 3 (2-2)

Prerequisites: GLG 340 (or permission); and either PHY 124 or PHY 204 (or concurrent enrollment in either); and either MTH 280 or MTH 288 (or concurrent enrollment in either). Application of geophysical methods in solving geologic problems. Techniques covered include seismic reflection and refraction, gravity, magnetics, and direct current and resistivity. Field trips required.

### REQUIRED TEXTBOOK:

Environmental and Engineering Geophysics by Reynolds. I do use the textbook during most of my lectures so be sure to bring your book to class.

### COURSE OBJECTIVES:

The purpose of this course is to introduce you to the basic techniques used in applied geophysics. The theory, data collection, data processing and interpretation of each technique will be introduced. The main goal is to learn how to solve geologic problems using geophysical methods.

### 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, you will receive a failing grade and will be financially obligated to pay for the class. To drop a class anytime after the first week of classes, you must complete and turn in a drop slip at an authorized registration center (see *2001/2002 SMSU Undergraduate Catalog*, pp. 49-50; <http://www.smsu.edu/recreg/chnsched.html>). You do not need to obtain any signatures on the drop slip. It does not need to be signed by your instructor, your advisor, or a department head. If you wish to withdraw from the University

(i.e., drop all your classes), contact the Registration Center, Carrington 320.

**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.

**GRADING:** There will be 2 exams, and weekly homework assignments. Each will constitute 33% of your grade. The exams are noncomprehensive. The homework will include working problems that I hand out, review of reading assignments, collecting, processing and interpreting data collected in the field, and computer-based (PC and UNIX) assignments. **NO GRADES OF INCOMPLETE WILL BE GIVEN THE LAST WEEK OF CLASS OR LATER. DO NOT ASK ME FOR YOUR GRADES, PLEASE KEEP TRACK OF YOUR OWN GRADES.**

### ***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.

#### **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/](http://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.

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## **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](http://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 [tompymate@missouristate.edu](mailto:tompymate@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](http://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/lcd>.

## **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*.

## SYLLABUS

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**GLG 590- ELEMENTS OF GEOPHYSICS**

**Approximate number  
of weeks applied to subject**

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Introduction to the Course, Basics of Geophysics	1
Gravity Method	4
Magnetic Method	4
Direct Current Resistivity Method	3
Seismic Refraction and Reflection Methods	3