

## POLICY STATEMENT

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### GEOLOGY

### DEPARTMENT OF GEOGRAPHY, GEOLOGY & PLANNING

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**GLG 597/697** – Seismic Data Processing  
TTH: 6:00-7:50  
Temple 335

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

**OFFICE HOURS:** TTH 1:00-2:00, F 2:00-5:00  
**OFFICE PHONE:** 836-6375  
**Email:** kevinmickus@missouristate.edu

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**Fall 2011**

### CATALOG DESCRIPTION:

#### **GLG 597/655, Seismic Data Processing 3 (2-2)**

The basic techniques to process seismic reflection data as used by the oil, environmental and mining industries. Techniques include-deconvolution, filtering, migration, stacking, normal movement. This is a computer based class.

### REQUIRED TEXTBOOK:

**None**-I will hand out papers during class.

### COURSE OBJECTIVES:

After taking this course, students should be able to understand the basic techniques in which seismic reflection data are collected and processed into a form that can be used for interpretation of the geologic structures in the subsurface.

### 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 two exams covering the material covered in the class. The questions will consist of short answers.

**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 be 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:** The majority of the course will consist of computer exercises. Twelve exercises will be given during the semester. Additionally, other homework assignments may be given which involve solving problems.

**GRADING:** Your grade will depend on the exams and the homework/writing assignments. Each will be worth 50% (Exam 1- 25%, Exam 2-25%, homework/writing assignments-50%). Each homework/writing assignment is due 1 week after it is assigned. If up to one week late, it is worth 50%. After one week, forget about turning it in. Each homework will be worth 10 points.

**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. **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.

## **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 [tomplymate@missouristate.edu](mailto: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](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](http://psychology.missouristate.edu/ldc), (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); 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 597-697**  
**(subject to change, which will be announced in class)**

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<b>LECTURE</b>	<b>Approximate number of lectures</b>
Introduction to Course	1
General Seismology	4
Basic processing-preparing seismic data	4
Velocity analysis	4
Normal Movement, Stacking	2
Editing	2
Deconvolution, Filtering	4
Statics	4
More Stacking	2
Migration	2

**FINAL EXAM TUESDAY, DECEMBER 13, 8:00-10:00 pm**