

**OPTICAL MINERALOGY (GLG 530)  
POLICY STATEMENT – FALL 2004**

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**Instructor Name** Tom Plymate

**Office** Temple 312

**Phone Number** 836-4419

**Office Hours** 9:00-11:00 MWF

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### CATALOG DESCRIPTION

**GLG 530 Optical Mineralogy. 3(1-4) F.** Prerequisite: GLG 333. Essentials of optical crystallography, the use of the petrographic microscope in the identification of rock-forming minerals, both in oil-immersion grain mounts and in thin sections.

### REQUIRED TEXTBOOK

Nesse, W.D., 2004, *Introduction to Optical Mineralogy*, 3<sup>rd</sup> ed., Oxford University Press.

### STRUCTURE OF THE COURSE

GLG 530 will be taught as an integrated lecture/laboratory course. Of the five hours we meet each week, approximately one will be devoted to lecture material and four to laboratory exercises. However, I will modify this distribution from time to time to best accommodate the various topics to be presented.

### GRADING

Course grades will be based on the standard 90%-80%-70%-60% fixed scale according to the following distribution:

Exams:	50% (500 points)
Lab Exercises:	50% (500 points)

### EXAMS

There will be three examinations over the lecture material presented in this course. The first exam, worth 150 points, will cover the principles of isotropic and uniaxial optics; the second, also worth 150 points, will cover biaxial optics. The final exam will be comprehensive and will be worth 200 points.

### LABORATORY EXERCISES

There will be ten graded laboratory exercise spaced more-or-less evenly throughout the semester. I will expect a thorough, well-organized, professional-looking report summarizing your results on each of these exercises. The topics and point values of these laboratory exercises are as follows:

Lab 0	Introduction to the Petrographic Microscope	
Lab 1	Isotropic Unknowns	40 pts
Lab 2	Introduction to Anisotropic Optics	20 pts
Lab 3	First Set of Uniaxial Unknowns	60 pts
Lab 4	Individual Uniaxial Unknowns	40 pts
Lab 5	Petrography of Quartzites and Cherts (2ts)	60 pts
Lab 6	First Set of Biaxial Unknowns	60 pts
Lab 7	Individual Biaxial Unknowns	40 pts
Lab 8	Petrography and Modal Analysis of Granites (1ts)	60 pts
Lab 9	Petrography of Gabbros and Andesites and the Michel-Levy Method for Estimating Composition of Plagioclase (2ts)	60 pts
Lab 10	Introduction to the Universal Stage	60 pts

## **ACADEMIC INTEGRITY POLICY**

Southwest Missouri State University is a community of scholars committed to the ideal of academic integrity. All members of the University community share the responsibility and authority to challenge and make known acts of apparent academic dishonesty. Any student detected participating in any form of academic dishonesty in this course will be subject to the sanctions spelled out in the new *Student Academic Integrity Policies and Procedures* document, effective Fall 2000. A copy of this document can be obtained at

<http://www.smsu.edu/acadaff/StudentAcademicIntegrity.pdf>.

## **DISABILITY ACCOMMODATION POLICY**

Any student who has a physical or learning disability which he/she believes may affect his/her performance in this course should arrange to meet with the instructor as soon as possible to discuss any accommodations that may become necessary. Any student who wishes further information about accommodations and services available to students with disabilities should contact

Coordinator, Disabled Support Services  
Plaster Student Union, Suite 405  
417-836-4192 (voice); 417-836-6792 (TTY)  
<http://www.smsu.edu/disability>

## **NONDISCRIMINATION POLICY**

Southwest Missouri State University is an equal opportunity institution and maintains a grievance procedure incorporating due process available to any person who believes he or she has been discriminated against. As a common courtesy, I ask that you attempt to bring any concerns about possible discrimination in this course first to my attention, and if that does not result in a satisfactory resolution, next to the attention of the department head. However, at all times, it is your right to address inquiries or concerns about possible discrimination directly to

Equal Opportunity Officer  
Carrington Hall, Room 128  
417-836-4252