Petrography - GEOL 525

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Lecture: MF (1300-1350), CSL-425
Lab: W (1400-1640), CSL-425
Office: GMCS-228K
Office Hours: Anytime - but you are most likely to find me after class, or TTH 11-12:15

Course Notes: Available at Aztec Shops (Camp, 2004)

Grading:

Two igneous lecture exams (75 pts. each): 150 pts
Metamorphic lecture exam: 100
Igneous lab exam: 100
Metamorphic lab exam: 100

Lecture Schedule:

Igneous Systems

Review (as needed)
Nature of the upper mantle
Ternary phase diagrams
Processes in igneous systems and their recognition

Igneous lecture exam #1 (date to be announced in class)
Origin of basalt
Stratiform gabbroic complexes
Origin of andesite/volcanic arcs, calc-alkaline batholiths
Rhyolite

Igneous lecture exam #2 (date to be announced in class)

Metamorphic Systems

Controls on metamorphism
Crystal growth in the solid state
Metamorphic facies and their recognition
P-T determinations
Metamorphism and plate tectonics

Metamorphic lecture exam (April 30 - 1300)
**Lab Schedule:**

**Igneous Systems**

- Jan. 12: Mineral review
- Jan. 26 - Feb. 2: Petrography of granites
- Feb. 9 - Feb. 16: Petrography of mafic and ultramafic plutonic rocks
- Feb. 23: XRF lab
- March 1: Petrography of volcanic rocks
- March 8: Geochemistry lab - computer applications (IGPET)
- March 22: Review
- March 29: **Lab exam on igneous rocks**

**Metamorphic Systems**

- April 5 - April 12: Petrography of metamorphic rocks #1 and #2
- April 19 - April 26: Petrography of metamorphic rocks #3 and #4
- May 3: **Lab exam on metamorphic rocks**

**Good Web Site for Petrography Reference:**

http://www.geolab.unc.edu/Petunia/IgMetAtlas/mainmenu.html

This site covers minerals and textures in both igneous and metamorphic rocks