Petrography - GEOL 525

Spring - 2004

Dr. Vic Camp GMCS - 228K

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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:

 $\underline{http://www.geolab.unc.edu/Petunia/IgMetAtlas/mainmenu.html}$

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