

VOLCANOES

GEOS 120

SPRING 2006

Professor: John Eichelberger, NSF Lecture Hall, Phone: 474-5530, Offices: 310 Elvey (GI),
Hours: Generally available in NSF on Tuesday and Thursday.

<i>Time and place:</i>	11:30 pm-1:00 pm, Apr 6 – May 4, NSF 201	
<i>Grading for Part C:</i>	Final exam (volcanoes only), May 4*	50%
	Labs	35%
	Quizzes, as indicated in schedule	15%

*Note: This is the last day of class, NOT finals week.

Volcanism is the most spectacular phenomenon that occurs on the Earth's surface (better than earthquakes and glaciers!) It is a fundamental process of planetary evolution, and represents both a serious hazard and substantial resource. We will explore what volcanoes are and how they work. The quizzes and final will be based entirely on lectures and lecture notes. Missed quizzes can be made up at the time of the final. However, the makeups will be harder than the originally scheduled quiz. Please come to class – emphasis in the quizzes and final exam is what I emphasize in class! All quizzes and the final will have bonus questions, the answers to some of which will only be given during lectures. Also, color slides are a lot more interesting and informative than lecture notes. Quiz results, quiz answers, and lecture notes will be available on Blackboard.

As we go, we'll check in on volcanoes on Earth (via the web) to see what they are doing, how the volcanological data are being interpreted, whether the volcanologists are proven right or wrong, and how the eruptions impact people. Right now, Mount St Helens in Washington and Augustine in near Homer are erupting and Mount Spurr, west of Anchorage is restless. We'll use Google Earth to virtually fly around lots of volcanoes. I am revising the course to keep things fresh and up to date, so reality may diverge somewhat from the following:

DATE	TOPIC	COURSE MATERIAL
April 6	Introduction	lecture by Joanna Malcolm
April 11	Volcanism and kinds of volcanoes	Lecture Notes I
April 13	Distribution of volcanoes	Quiz I, Lecture notes II
April 18	What is magma?	Lecture Notes III
April 20	Eruption processes	Lecture Notes IV; Quiz II
April 25	Some famous eruptions	Lecture Notes V
April 27	How volcanoes are monitored	Lecture Notes VI; Quiz III
May 2	Volcano hazards; video; review	
May 4	Final exam (volcano section)	Also, make up missed quizzes.

Important web sites:

<http://www.avo.alaska.edu>

<http://vulcan.wr.usgs.gov>

<http://photojournal.jpl.nasa.gov>