

Syllabus
GEOS 218 - Section 2 – Geological Disasters and Society
Fall 2009

Lecture: T & Th 11:00AM – 12:15PM, ILC Rm 130

Instructor:

- Professor Susan Beck
- Phone & Email: 621-8628; slbeck@email.arizona.edu
- Office Hours Gould-Simpson Bldg. Rm 537, Tues. 1:30-2:30, Wed 11:00-12:00 or by appointment

Teaching Assistants:

- Mark Warren GS Rm 560A; warren@email.arizona.edu Office Hours T 2-3, Th 3-4 or by appointment
- Kelly Umlauf GS Rm 333; umlauf@email.arizona.edu Office Hours W 10-11. F 1-2 or by appointment

Course Description: Catastrophic and hazardous earth processes (earthquakes, volcanism, floods, hurricanes, and climate change) are important in shaping the Earth. This course will acquaint students with the scientific principles governing these processes and consider their impact on society.

Units: 3

Prerequisite(s): two courses from Tier One, Natural Sciences (NATS 101, 102, 104).

Approved as: General Education Tier Two: Natural Sciences

Required text: Patrick L. Abbott, Natural Disasters, 7th ed., McGraw-Hill

Website: found at <http://www.geo.arizona.edu/geo2xx/geos218/>

Grading:

- | | |
|--|-----------|
| 1. Three 70-min exams (100 pts each) | = 300 pts |
| 2. Homework (4 out of 5 worth 25 pts each) | = 100 pts |
| 3. Quizzes (3 out of 4 worth 20 pts each) | = 60 pts |
| 4. Extra Credit opportunities | = 40 pts |

Course grade based on percentage of 460 total points: A = >90%; B = 80-90%; C = 70-80%; D = 60-70%; E = <60%. Grades will be available through D2L.

UA Policies:

Absence policies; in addition to the instructor's own absence policies, the following kinds of excused absences are permitted: 1) All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion, 2) Absences pre-approved by the UA Dean of Students (or Dean's designee) will be honored.

Academic Integrity: Integrity and ethical behavior are expected of every student in all academic work. This Academic Integrity principle stands for honesty in all class work, and ethical conduct in all labs and clinical assignments. The Student Code of Academic Integrity will be followed. See: <http://dos.web.arizona.edu/uapolicies/>

Disruptive Behavior is Prohibited. "Disruptive behavior" means conduct that materially and substantially interferes with or obstructs the teaching or learning process in the context of a classroom or educational setting. Disruptive behavior includes conduct that distracts or intimidates others in a manner that interferes with instructional activities, fails to adhere to an instructor's appropriate classroom rules or instructions, or interferes with the normal operations of the University.

Text-Messaging and Cell-Phone Use in the Classroom is considered disruptive in this class. Emergency situations, if they arise, are the exception.

Policies against threatening behavior by students: The University seeks to promote a safe environment where students and employees may participate in the educational process without compromising their health, safety or welfare. The Arizona Board of Regents' Student Code of Conduct, ABOR Policy 5-308, prohibits threats of physical harm to any member of the University community, including to one's self. Threatening behavior can harm and disrupt the University, its community and its families. *Threatening Behavior is Prohibited.* 'Threatening behavior' means any statement, communication, conduct or gesture, including those in written form, directed toward any member of the University community that causes a reasonable apprehension of physical harm to a person or property. A student can be guilty of threatening behavior even if the person who is the object of the threat does not observe or receive it, so long as a reasonable person would interpret the maker's statement, communication, conduct or gesture as a serious expression of intent to physically harm. If threatened by any student's conduct to the point of reasonable fear of immediate physical harm to self, others or property: 1. Leave the area immediately. 2. Call the Police by dialing 9-1-1 to request that an officer come to the location. Inform the Police if it is a repeat occurrence. 3. Anyone who observes what appears to be threatening behavior must report it to the Dean of Students Office and in the appropriate case file a Student Code of Conduct Complaint (see ABOR 5-403)." University policy is found at <http://policy.web.arizona.edu/~policy/threaten.shtml>.

Students with Disabilities: If you anticipate issues related to the format or requirements of this course, please meet with us. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Resources (621-3268; drc.arizona.edu) and notify us of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations. More info: <http://drc.arizona.edu/learn/index.html>

Information contained in the course syllabus, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.

**GEOS 218 – Section 2: Geological Disasters and Society
Fall Semester, 2009**

<u>Date</u>	<u>Lecture Topic</u>	<u>Reading</u>
Aug. 25	Introduction to the course and natural hazards	Abbott 1
Aug. 27	Energy	Abbott 2
Sept. 1	Plate Tectonics I	Abbott 3
Sept. 3	Plate Tectonics II	Abbott 3
Sept. 8	Earthquake Geology & Seismology	Abbott 4
Sept. 10	Earthquakes & Tsunamis	Abbott 5
Sept. 15	Earthquakes in the U.S.	Abbott 6
Sept. 17	Active Tectonics and Hazards	Abbott 6 & 7
Sept. 22	Wrap-up and Review	
Sept. 24	EXAM #1	
<hr/>		
Sept. 29	Magmas and Volcanoes	Abbott 8
Oct. 1	Volcanic Landforms & Eruption Styles	Abbott 8
Oct. 6	Volcanic Eruptions: Case Histories	Abbott 9
Oct. 8	Supervolcanoes: Yellowstone	Abbott 9
Oct. 13	Mt. Pinatubo <i>In the Path of a Killer Volcano</i>	
Oct. 15	Volcanic hazards	
Oct. 20	Wrap-up and Review	
Oct. 22	EXAM #2	
<hr/>		
Oct. 27	Atmosphere & Oceans Circulation	Abbott 11
Oct. 29	Climate Change Long term	Abbott 11
Nov. 3	Climate Change Short Term	Abbott 12
Nov. 5	Severe Weather	Abbott 12
Nov. 10	Hurricane	Abbott 13
Nov. 12	Hurricane Katrina	Abbott 13
Nov. 17	Floods	Abbott 14
Nov. 19	Wildfires	Abbott 15
Nov. 24	Impacts	Abbott 16 & 17
Nov. 26	Thanksgiving; No Class	
Dec. 1	Wrap-up and Review	
Dec. 3	EXAM #3	
Dec. 8	Wrap-up	