

Geology/Geography 106

Introduction to Natural Hazards and Disasters

Geology 106/Geography 106: Introduction to Natural Hazards and Disasters (3488 E)

Rm: B262

Lecture/Lab: M W 11:30-1:20; F 12:30-1:20

Instructor: Rob Viens

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Office Hours: MWF 1:30-2:20 & by appointment (Also available for questions by e-mail)

Class Web Site: <http://scidiv.bellevuecollege.edu/rv/106/>

Required Texts: *Natural Hazards* (2008) by Edward Keller and Robert Blodgett

Lecture: Attendance will not be taken; however, graded exercises will be completed during class time and the exams will be based on lecture material as well as readings from the text, so it is highly recommended that you do attend! The class website lists the assigned reading from the textbook - watch for updates throughout the quarter. It is in your best interest to complete the assigned readings *before* lecture. Interaction, questions, discussions are encouraged and expected. *Cell phones, talking in class, recurring late arrivals, and other disruptions are distracting to other students and the instructor and will not be tolerated during class time. Recurring problems will be reported to the Dean of Student Services and can result in suspension and/or loss of credit.*

Grades:

Exercises & Projects	250
Midterms (75 pts each)	150
Final	<u>100</u>
Total	500 pts

Exercises and Projects: There will be approximately two in-class assignment per week plus several short take-home exercises throughout the quarter. Projects are basically longer, more involved exercises that will be completed outside of class. All assignments will be from handouts or provided online via the class web site. Exercises will be explained during the quarter and may include hands-on activities to supplement lecture, monitoring ongoing natural hazards, and short take-home assignments to better prepare yourself for dealing with natural disasters at home (more information will be provided). There will be 2 or 3 longer projects including a potential service learning project and a short report on a famous (or infamous) natural disaster or catastrophe in history. Exercises and Projects will be worth 250 points. (Details will be distributed separately.)

Exams: There will be 2 midterms during the quarter worth 75 pts each (one approximately every month) and a final exam at the end (100 pts). The final exam will contain some material from the entire quarter, but will primarily be on the last section of the class. *There are no makeup exams so please carefully note the dates.*

Special Needs Students: Students with disabilities who have accommodation needs are required to meet with the Disability Resource Center (DRC) office, room B233-G (telephone 425.564.2498 or TTY 425.564.4110), to establish their eligibility for accommodation. The DRC office will provide each eligible student with an accommodation letter. Students who require accommodation in class must review the DRC

accommodation letter with each instructor during the first week of the quarter. Students with mobility challenges who may need assistance in case of an emergency situation or evacuation should register with Disability Resource Center, or review those needs with the instructor as well. (The DRC website is linked to the main BCC website: <http://bellevuecollege.edu>.)

Extra Credit, Make-ups, Incompletes: Opportunities for one or two extra credit assignments (including additional field trips) will be offered during the quarter to the entire class. *I do not allow any other type of individual extra credit, make-ups, or incompletes.*

IMPORTANT NOTE: All assignments are due on the dates assigned, and will receive reduced credit if turned in late. Assignments will not receive any credit if turned in more than two days late. All assignments should be typed. Handwritten assignments will be returned for resubmittal

Science Division Policy on Cheating: You, the student, are expected to conduct yourself with integrity. If you cheat*, or aid someone else in cheating, you violate a trust. If you cheat, the following actions will be taken:

1. You will receive a grade of "0" on the work (exam, assignment, lab, quiz, etc.), where the cheating occurred. This grade cannot be dropped.
2. A report of the incident will be sent to the Dean of Students. He may file the report in your permanent record or take further disciplinary action such as suspension or expulsion from the college.

If you feel you have been unfairly accused of cheating, you may appeal. (For a description of due process, see WAC 132H-120.)

**Cheating includes, but is not limited to, copying answers on tests or assignments, glancing at nearby test papers, swapping papers, stealing, plagiarizing, and illicitly giving or receiving help on exams or assignments.*

Calendar for Fall Quarter, 2009

Note: New material is being added and updated each week. Dates and specific topics are subject to change.

The PPT lectures are saved here as pdf files to make them accessible to all computers. Clicking on the lectures will download them to your desktop. These lectures are provided for study only. Images and graphics used come from the instructor, as well as several other sources and should not be used for other purposes without permission of the appropriate author. Most computers come with **Adobe Acrobat**

Reader installed, but if you don't have it [you can download it for free here](#).

Week	Monday	Wednesday	Friday
1 9/21	Introduction What are hazards, disasters and catastrophes?	Science, Politics and Society Risk Assessment	Scientific Method Plate Tectonics - <i>the root of hazards from below</i>
2 9/28	Plate Tectonics Faults and How Earthquakes Work	Measuring Quakes - Magnitude and Intensity	Locating Quakes - Intraplate Quakes and the Pacific NW
3 10/5	No Class College Issues Day	Earthquake Hazards (including Tsunami)	Psychology of Disasters <i>Guest Speaker: Helen Taylor, BC Psychology</i>
4 10/12	Earthquake Forecasting	Earthquake Preparation	Exam 1

5 10/19	Magma, Rocks and Volcanic Eruptions	Volcanic Eruptions and their products Home Earthquake Hazard Assesment Due	Volcanic Hazards (including video)
6 10/26	Volcanic Hazards and Mitigation Washington Volcanoes	The Atmosphere - <i>the source of aerial distruction</i>	Rampaging Monsters, Mythology and Natural Disasters - <i>A Special Lecture for Halloween</i>
7 11/2	Hurricane Science	Hurricanes, Coastal Impacts and Aftermath of Disasters	Hurricane Effects and Mitigation
8 11/9	Tornados Windstorms and Extreme Weather in the Pacific NW <i>Guest Speaker: Kent Short - BC Meteorology</i>	No Class Veteran's Day	Exam 2
9 11/16	Hydrologic Cycle & the Science of Floods	Flooding Hazards	Flood Hazards and Mitigation
10 11/23	Mass Wasting - Why Hillslopes Fail	Mass Wasting Mitigation	No Class Thanksgiving Holiday
11 11/30	Mass Extinctions & Impacts and Near Earth Objects	Mass Extinctions & Impacts and Near Earth Objects Final Project Wrap Up	Climate Change and the Future
12 12/7	Final Exam 11:30-1:20		