

ESC 1000 Fall 2004
Dr. Neuhoff
Extra Credit Assignment

This assignment is not mandatory; it is provided as an opportunity to receive extra credit in the class. There are 75 total extra points possible for this assignment (out of a total for the class of 1000), which means that getting all of the points possible can bump your grade up over half a letter grade. This is an individual assignment, and you are expected to respect all of the provisions of the honor code in completing it (i.e., do your own work, do not copy off others, do not have others do it for you, etc.). Plagiarism will absolutely not be tolerated; commercially-available essays and primary reference sources will be consulted prior to grading of essays. Failure to comply with the honor code on this or other assignments in the class is grounds for reprisal, up to and including receiving a failing grade.

Due Date: Friday, December 3 by the start of class; assignment can be turned in to Dr. Neuhoff at lectures, during office hours, or turned in to the Geological Sciences Department Office (241 Williamson). No late or emailed essays will be accepted. Make sure to put your name and UF ID on the essay.

The assignment (Read all of this carefully!!!):

Dante's Peak (1997; Universal Pictures) is arguably the most realistic of several television and theater volcano movies released several years ago. In it, United States Geological Survey (USGS) geologist Harry Dalton (played by Pierce Brosnan) comes to a small town in the Northern Cascades to investigate a potential eruption threat from a fictional volcano called Dante's Peak. As the movie unfolds, a team of USGS geologists join Dalton to monitor the volcano, which predictably erupts leading to human tragedy, mass destruction, and a silly love plot between Dalton and the town's mayor (played by Linda Hamilton). Despite some plot shallowness that received much criticism by reviewers, the technical aspects of the volcanic eruptions (with some artistic liberties) and volcano monitoring as well as the discussion of public sentiment about volcanic hazards was well-researched and realistic.

The assignment consists of watching the movie (on your own time; it is available from several local video rental stores) and writing a 2-3 page essay discussing the events portrayed in the movie. You may use any additional resources you wish; much of the background needed will be covered in the lecture on volcanic eruptions (September 29) and is in the textbook as well. There are some good web resources as well as books in various UF libraries, but it is up to you to find them.

In the course of the essay, you should address all of the following points/questions as completely as possible:

- 1) What sort of volcano is Dante's Peak, and how do you know? Is this type of volcano found in the Cascades, and why? If so, list at least three real-life examples of this type of volcano in the Cascades.
- 2) How realistic was the eruption depicted? Make sure to list as many of the eruption phenomena and other geological events associated with the eruption as possible and note which ones are consistent with this type of volcano. Include a discussion of the types of products erupted from the volcano (including what you can infer their general composition) and how this influences the explosiveness of the eruption.
- 3) What techniques/instruments/measurements did the scientists monitor the volcano prior to eruption? What warning signs were cited? Where the monitoring techniques and warning signs mentioned in the film realistic (i.e., what phenomena are typically monitored in real life by volcanic hazard specialists)?
- 4) The public reaction to USGS warnings and the possibility of a nearby volcanic eruption was a composite of behavior surrounding several recent eruptions and eruption alerts in the U.S., most of which were mentioned in the film. Note the main points of view about volcanic hazard warnings in your essay and how this impacts the work of geologists charged with making alerts about volcanic threats.

Note about essay style, English usage, typing, etc.

I expect any essays turned in for this assignment to be written in proper, formal English in an essay format. Twenty out of the 75 points will be based on proper spelling, grammar usage, sentence and paragraph structure, and essay form. This includes proper use of scientific terms; all terms you will need are used and defined in your textbook. For essay format, make sure to have an introductory paragraph and a concluding paragraph in addition to the body of the essay that addresses the points above and any others you feel are relevant. All paragraphs should have at least three sentences, including introductory and concluding sentences with a topic sentence appropriately placed in the paragraph. Do your best to have smooth transitions between sentences and paragraphs. **ONLY TYPE-WRITTEN ESSAYS WILL BE ACCEPTED**, and the font should be at least 12 pt. with a line spacing of at least 1.5 spaces. Any questions about the terms of this assignment should be addressed to Dr. Neuhoff.

Take note of the following!!!:

- 1) Essays longer than 3 pages, essays that are not stapled, or essays that include quotations from other sources will not be graded.
- 2) Electronic submissions will not be accepted.
- 3) Essays will be very strictly graded based on the completeness with which the four points listed above are addressed and English usage. Avoid the use of slang, colloquialisms, and conjunctions. Be sure to properly use capitals for proper nouns and not for other nouns.
- 4) Find someone to read through your essay and make suggestions before turning it in.