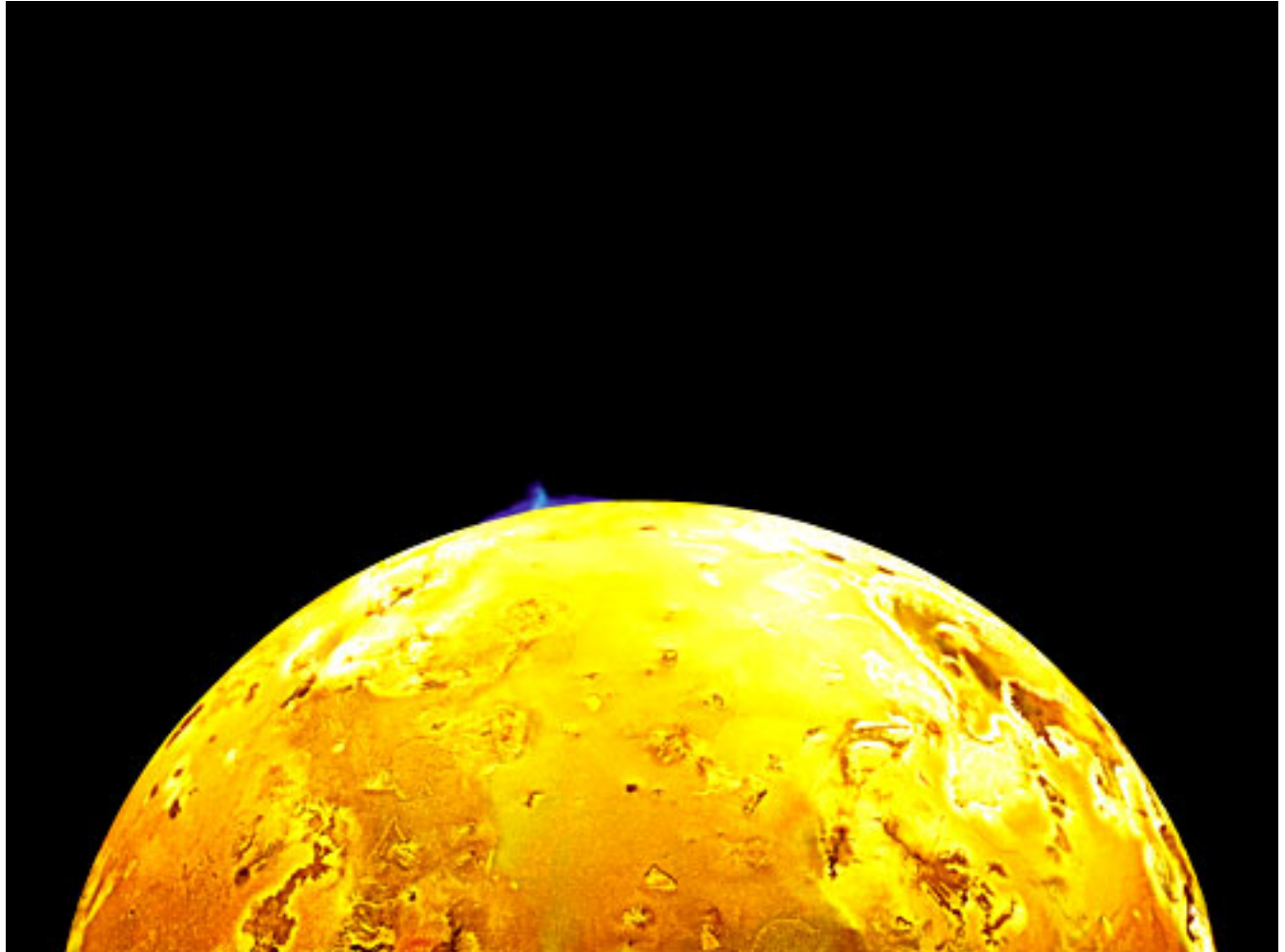


Geologic Hazards and Natural Disasters



**SPRING 2006-----GEOS 629: 3 credit seminar-----
Tues-Thurs 9:45-11:15 room 306 NSF**

OPTIONAL TEXT: Natural Hazards by E. A. Bryant (Cambridge Univ. Press) 294 pp.
And a series of topical scientific papers to be assigned through the term

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Geologic Hazards

and Natural Disasters

This class is designed to provide an overview of scientific approaches to the evaluation and assessment of natural hazards.

We will review different types of hazards, including those associated with volcanic eruptions, earthquakes, floods, and other natural processes. We will discuss the surficial processes and character of geologic deposits associated with different sorts of catastrophic natural processes. We will evaluate scientific approaches to the concept of risk and the identification of hazard zones

In this course we will also discuss examples of some of the largest natural disasters of the last 2000 years of recorded human history. These well-documented case studies will illustrate the impacts on human society of catastrophic natural events. We will consider what steps humans can take to plan for and respond to disasters.

This class is a seminar, and will require independent work on the part of students. Readings from the text will be assigned each week to the entire class. I will also select papers each week to match the topics (suggestions from students are welcome) and these will be presented by students. I anticipate that 2-3 papers will be covered each week. I will introduce each week's topics with a lecture on Tuesday. The Tuesday lecture will be supplemented with slides, powerpoint, and films. On Thursday, the class will consist entirely of the seminar presentations and discussion. Students are expected to participate both as presenters and in discussions.

This is a graded class. The grades will be based 75% on the quality of student presentations and discussions, and 25% on a short (10 pp) research paper due at the end of the term.