



BROWN

Geological Sciences Department

To: Freshmen and Sophomores
From: Jan Tullis, Chair, GeoScience Undergraduate Program

Here is a list and a very brief description of some courses offered by the Dept. of GeoSciences in 2006-2007 which might be of special interest to freshmen and/or sophomores. If you have questions about these courses (including enrollment, type of work, assumed background knowledge) you may call me at 3-1921, or use email: jan_tullis@brown.edu.

Courses with no pre-requisites, aimed at liberal arts students:

GE 1, Face of the Earth, sem. II, F hr., Prof. P. Gromet: *Study of Earth's surface and geological processes affecting it, including plate tectonics.*

GE 5, Mars, Moon, & Earth, sem. I, G. hr., Prof. J. Head: *Surveys the planets and moons in the solar system and their relationship to Earth.*

GE 7, Introduction to the Ocean, sem II, G hr., Prof. W. Prell: *Surveys the relationship of coastal & global oceanography to climate changes, weather, coastal erosion and pollution, productivity and fisheries.*

GE 16, First-Year Seminar: Volcanoes, Windows Into the Deep Earth (Sec. 02), sem I, I hr., Prof. A. Saal: *Examines the physical and chemical principles controlling the generation of volcanoes and their different styles of eruption.*

GE 16, First-Year Seminar: Patterns: in Nature, in Society (Sec. 04), sem I, J hr., Prof. R. Cooper: *Societies and economies show temporal and spatial patterns. Does the "flow rate" of ideas and of money cause these patterns and does "entropy rule"?*

GE 16, First-Year Seminar: Global Environmental Change (Sec. 21)/ES 07 (S04), sem I, C hr., Prof. J. Mustard: *Examines evidence that supports or refutes perspectives on global environmental change.*

GE 16, First-Year Seminar: Living Within the Landscape (Sec. 20)/ES 07 (S03), sem II, I hr., Prof. K. Fischer: *Examines the physical processes that shape the Earth's surface and provide context for human activity.*

Courses with no pre-requisites, aimed primarily at science students:

GE 22, Physical Processes in Geology, sem. I., D hr., Profs. J. Tullis & K. Fischer: *Rigorous introduction to the configuration and origin of surface and interior features of the Earth, with an emphasis on understanding the physical processes that produce them.*

GE 23, Geochemistry: Earth & Planetary Materials & Processes, sem. II, C hr., Profs. P. Gromet & R. Cooper: *Survey of the minerals and rocks making up the Earth, moon, and meteorites, and the role of chemical processes in their evolution.*

GE 24, Introduction to Earth Systems History/ ES 24, sem. II, I hr., Prof. T. Herbert: *Examines the processes that control Earth's surface environment, including tectonic, climate & chemical cycles and their interactions with life forms.*

GE 58, Foundations of Physical Hydrology/ES 58, sem. I, C hr., Prof. J. Hermance: *Processes of groundwater and watershed systems, to provide understanding for water policy and management.*

GE 81, Planetary Geology, sem. II, G hr., Prof. P. Schultz: *Focus is on understanding the processes that shape planetary surfaces and comparing the landforms and environments on the different planets, achieved by planning a mission to Mars.*