Geosc. 10
Rocking the Parks

Fall 2008

Instructor: Dr. Daniel Vice
Lecture: Tuesday and Thursday 6:00-7:15 PM
203 Kostos Building
Office: 112 Graham
Office Hours: Tuesday 4:00 to 5:00 PM
Thursday 1:00 to 2:00 PM
Also by appointment
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Philosophy: Geology is an interesting and very enjoyable subject. I will serve as your guide, leading you through some of the highlights and around some of the pitfalls. When we get to the end of the class, I hope to have given you an appreciation of the subject that will help you in whatever career you embark upon in the future.

Objectives: When you get through with this course, you will be expected to understand the general outline of the geology of the United States and plate tectonics. You will be expected to understand and be able to answer questions relating to important surface processes, such as weathering, mass movement, stream transportation of sediments, glaciations, and coastlines.

Supplemental Reading: A wide range of books on geology are available in you are interested in pursuing some aspects of the subject in more detail. A few titles are listed here to get you started. These books are in the library.

Gemstones for Everyman, by Anderson
Earthquakes, Science and Society, by Brumbaugh
Ore Geology and industrial minerals: an introduction, by Evans

Annals of the Former World, by McPhee

Roadside Geology of Pennsylvania, B. Van Diver

Grading: Grades will be based on two mid-semester exams (30% each and a final exam (30%). There will also be one in-class exercises (10%). The exams will be multiple-choice and will not be cumulative. There will be a chance for extra credit.

Attendance: Attendance will be taken to help me learn names and to move a student to a higher grade if he/she is on the borderline between two grades.

Academic Integrity: All students are expected to act with civility and personal integrity. They should respect other student’s dignity, rights and property; and help create and maintain an environment in which all can succeed through the fruits of their own efforts. An environment of academic integrity is requisite to respect for self and others and a civil community.

Academic integrity includes a commitment to not engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty include cheating or copying, plagiarizing, submitting another person’s work as one’s own, using internet sources without citation, fabricating field data or citations, “ghosting” (taking or having another student take an exam), stealing examinations, tampering with the academic work of another student, facilitating other student’s acts of academic dishonesty, etc.

Students charged with a breach of academic integrity will receive due process and, if the charge is found valid, academic sanctions may range, depending on the severity of the offense, from F for the assignment to F for the course.

The University’s statement on academic integrity, from which the above statement is drawn, is available at http://www.psu.edu/dept/oue/aappm/G-9.html

Class Schedule

Aug. 26  Introduction and course outline
Aug. 29  Plate Tectonics – Death Valley is growing wider
Sept. 2  Plate Tectonics II – Crater Lake
Sept. 4  volcanoes and Volcanic Hazards – Mt. St. Helens
Sept. 9  Yellowstone, Earthquakes and Volcanoes
Sept. 11 Mountain building and Metamorphism I – The Smokies
Sept. 16       Mountain building and Metamorphism II – Rocky Mountains
Sept. 18       Weather and Climate in the Redwoods
Sept. 23       Weathering – The Badlands and Mass Movement
Sept. 25       Review Session
Sept. 30       First Mid-term
Oct. 2         River Processes and Canyonlands
Oct. 7         Groundwater and Mammoth Cave
Oct. 9         Glaciers and Glacier National Park
Oct. 14        What Glaciers Do – Deposition and the Kettle Moraine?
Oct. 16        Sedimentary Rocks and Bryce
Oct. 21        Stratigraphy and Arches
Oct. 23        Coasts and Cape Cod
Oct. 28        Review Session
Oct. 30        Second Mid-term
Nov. 4         Age of the Earth I – Great Basin and Layer Counting
Nov. 6         Age of the Earth II – Uniformitarianism and the Grand Canyon
Nov. 11        Age of the Earth III – Radiometric Dating and Isle Royale
Nov. 13        Evolution (Physical Change) and the Florissant Fossil Beds
Nov. 18        Dinosaurs and Extinction
Nov. 20        Island Biogeography - Yellowstone

Nov. 24 through Nov. 28 Thanksgiving Break

Dec. 2         Finding Energy
Dec. 4         Importance of mineral resources and how they occur
Dec. 9         Review Session
Class Schedule

Dec. 11       Third Exam

Dec. 15-19 Finals Week

The above schedule for this course is subject to change in the event of extenuating circumstances.