

SYLLABUS FOR GEOLOGY OF THE NATIONAL PARKS (GEOL 0802)**FALL 2012****General Information:**

Prerequisites: none

Class Times: M 6:00-8:30 pm

Lecture Location: Thaw 203 (Enter SRCC, take elevator to 5, go right through double doors.)

Website: Lecture and other materials will be available on CourseWeb: <http://courseweb.pitt.edu>**Instructors:**

Dr. Charles E. Jones

Telephone: 412-624-6347

Office: 503 SRCC

Office Hours: M 3:00 P.M.- 5:00 P.M. or call for appointment

Email: cejones@pitt.edu **NOTE: I get so much e-mail that I would get nothing else done if I tried to answer it all. Thus, if you need a quick answer, do not be shy about talking to me after class or in my office!**

Text: There are two texts that I can recommend: The *Essentials of Geology* by Stephen Marshak, any edition, is a great text introducing the basic geologic principles you need to understand the geology of national parks. The best single reference for the geology of the national parks and monuments (excluding Alaska, unfortunately), is *The Geology of the U.S. Parklands* by Eugene P. Kiver and David V. Harris. If you follow up a chapter in the *Geology of the U.S. Parklands* with some targeted Google image searchers, you'll be ready for any park.

Course Overview:

This course attempts to blend an overview of some of the nation's greatest national parks with a general understanding of how the Earth works. In class exercises will provide some hands-on experiences identifying rocks and minerals and providing a better understanding of selected geologic processes.

Grading:

The course grade will be based on two midterm exams, a final, and homework. The midterms and final exam will cover the lecture materials and exercises. The overall grading breakdown will be as follows:

Exercises:	Mostly given out in class.	15 %
First Exam:	Monday, Sept 24th	15 %
Second Exam:	Monday, Oct. 22nd	20 %
Third Exam:	Monday, Nov. 19th	25 %
Final Exam:	Monday, Dec. 10th, normal class time & place	25 %
Total:		100 %

All three exams will count, but you may drop your lowest exercise score. It will *not* be possible to make up missed exams, recitation exercises, or homework, unless you have a note from (1) a doctor or a dean, and (2) clearance from Dr. Jones. If you anticipate a schedule conflict, please see your TA (for recitation conflicts) or Dr. Jones (for exam conflicts) ahead of time to make arrangements. **E-mail Dr. Jones or your TA *immediately* if some emergency (e.g., a car crash) keeps you away from your exam/in-class exercise.**

A = 90-100%, B = 80-90%, C = 70-80%, D = 60-70%, F = 0-60%. Plus and minus grades are assigned as follows (using B grades as an example): B- = 80-83%, B = 83-87%, B+ = 87-90%.

Learning Disabilities or Non-Native Speakers:

If you need extra time or other accommodations during exams, contact Disability Resources and Service to find out what you need to do! Here is their web page: www.drs.pitt.edu. If you are not fluent in English and think it may slow you down on exams, please let Dr. Jones know in advance of the first exam!

Cheating

Cheating will not be tolerated on the exams or in any part of the recitations. Cheating means getting any unauthorized assistance from any source during an exam or in preparation of a homework or recitation. You cannot copy from another person, refer to hidden notes of any type, or receive information via electronic or other means. Most recitation exercises will be run in small groups to facilitate discussion and to make covering the material a bit more fun. However, you are not allowed to be a parasite, copying down what the others in your group produce. You must intellectually participate!

Plagiarism

Plagiarism is when you copy someone's work and allow people to think it is your own. The most common form of plagiarism today is when students copy and paste items directly from web pages. To avoid charges of plagiarism, you must rewrite everything in your own words and list any resources that you consulted at the bottom of the essay. It is easiest to rewrite something in your own words if you take brief notes and do not look at your source while you think of how you are going to say it. To some it seems ridiculous to simply rephrase what someone else has already said adequately well, but I can tell you that a collection of cut and pasted quotes generally reads really, really badly. You will be much better off if you write a whole essay in your own words. The point of any writing assignment is to get you practice in clear communication. If engineers had mastered the art of clear communication, the space shuttle Challenger might not have flown the day it exploded. (Note: Some disciplines thrive on direct quotes (e.g., history), but in sciences direct quotes are very rare. We generally give credit for ideas or data without direct quotation.)

The standard penalty for cheating or plagiarism is immediate failure in the class. Egregious or repeated violations are rewarded with suspension or dismissal from the University.

Here are some standard blurbs I'm required to include:

Disabilities: If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Resources and Services, 216 William Pitt Union, 412-648-7890/412-383-7355 (TTY), as early as possible in the term. Disability Resources and Services will verify your disability and determine reasonable accommodations for this course.

Official Academic Integrity Policy: Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity will be required to participate in the outlined procedural process as initiated by the instructor. A minimum sanction of a zero score for the quiz, exam or paper will be imposed.

Official E-mail Communication Policy: *Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers (e.g., Hotmail, AOL, Yahoo). Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address. To forward e-mail sent to your University account, go to <http://accounts.pitt.edu>, log into your account, click on Edit Forwarding Addresses, and follow the instructions on the page. Be sure to log out of your account when you have finished. (For the full E-mail Communication Policy, go to www.bc.pitt.edu/policies/policy/09/09-10-01.html.)*

Tentative Outline of **Geology of the National Parks** (GEOL 0802)
by Charles E. Jones
Fall 2012

This class is still very much a work in progress. Compared to all of my other classes, it is much harder for me to plan out in advance exactly what I'll be talking about. Thus, this list is a highly tentative list of topics that I'll cover. My goal is to mix the basics of geology in with the national parks. Hopefully this will make it possible for you to have a better appreciation for the landscapes that you'll see as to visit our national and state parks.

Lecture Topic	Possible Exercises
Volcanic Parks: Hawaii, Mt. Helens, Yellowstone. How volcanos work.	
Yellowstone geothermal features. Plate tectonics and causes of volcanism.	Minerals
Weathering and erosion by rivers and glaciers (Colorado Plateau and Alaskan parks illustrating various processes)	Igneous rocks
Yosemite and Kings Canyon: Intrusive rocks and metamorphism.	Metamorphic rocks
Sedimentary rocks. Grand Canyon and other Colorado Plateau parks and relative geologic time.	Sedimentary rocks
Absolute geologic time. Geologic structures and the geology of Alaskan national parks	Geologic Structures
Geology of Selected Rocky Mountain Parks	Geologic Time
Geology of Selected Basin and Range Parks	
Geology of Acadia, Virginia, and Smoky Mountains National Parks	
Geology of the Everglades National Park; Mammoth and Carlsbad Caverns	