

GEOLOGY 101 - PHYSICAL GEOLOGY

SPRING 2003

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Office Hours: TTh, 11:00-12:00; Th, 1:30-3:00.
Other times by appointment

Texts: *Earth's Dynamic Systems*, 9th ed., Hamblin & Christiansen, *100 Topographic Maps*, Debruhl, ed.

Jan	9	Plate Tectonics	H&C Ch. 1, 2
	14	Atomic structure, ions, bonding	H&C Ch. 3
	16	Minerals	H&C Ch. 3
	21	Silicate minerals	H&C Ch. 3
	23	(1st EXAM)	
	28	Bowen's Reaction Series	H&C Ch. 4
	30	Igneous rocks	H&C Ch. 4
	31	Grad Apps due for May grads/ RJWPP due for Spring 03	
Feb	4	Volcanoes and plutons	pp. 533ff., 571ff., 592-601
	6	(2nd EXAM)	
	11	Weathering	H&C Ch. 10
	13	Sedimentary rocks-clastics	H&C Ch. 5, 12
	18	Chemical sedimentary rocks	H&C Ch. 5, p. 424 ff.
	20	Metamorphic rocks	H&C Ch. 6
	20	Last day to drop a class with a W. Tomorrow is WF day.	
	25	(3rd EXAM)	
	27	Plate Tectonics	H&C Ch. 17
Mar	4	Plate Tectonics	H&C Ch. 17, 21
	6	More Meta Rocks	H&C Ch. 6, 23
	11-13	SPRING BREAK	
	18	Earthquakes	H&C Ch. 18
	20	(4th EXAM)	
	25	Stream Processes	H&C Ch. 12
	27	Groundwater	H&C Ch. 13
Apr	1	Groundwater	H&C Ch. 13
	3	(5th EXAM)	
	8	Alpine Glaciation	H&C Ch. 14
	10	SPRING BONUS DAYS	
	15	(6th EXAM)	
	17	Continental Glaciation	H&C Ch. 14
	22	Coastal geology	H&C Ch. 15
	24	Coastal geology	H&C Ch. 15

The Final Exam for this class is scheduled for Tuesday 6 May at 11 am.

My objective for this class is that you learn a system of knowledge about earth materials and the processes that are responsible for their formation. Because geology is an applied science, elements of chemistry, physics and mathematics are required. Laboratory exercises stress practice of skills and methods of problem-solving that geologists use. Field trips are essential for making observations about the physical processes that are active on earth, and applying lecture material. Frequent tests will allow you to monitor your progress in mastering this system of applied knowledge.

If you have a physical, psychological, and/or learning disability which might affect your performance in this class, please contact the Office of Disability Services, 126A B&E, (803) 641-3609, as soon as possible.

The Disability Services Office will determine appropriate accommodations based on medical documentation.

Good writing is valued in this course. Please remember that written work that you produce in this class can be included in your rising junior writing portfolio. For further information on the portfolio requirement please consult your USCA Undergraduate and Graduate Bulletin or visit Dr. Lynne Rhodes, Director of Writing Assessment, or Mr. Karl Fornes, Director of the Writing Room.

Grading: There will be six 30 minute exams (40 pts) and a final (80 pts). The highest score of six 30 minute exams will be doubled. No exams will be made up, rescheduled or dropped.

Book report: You will be given a book list the first week of classes; You will choose a book from the list, read it, and write a report on it for 25 points. Details on the report will be included on the book list.

Laboratory: 10 pts a week may be scored in the Laboratory. Scores will be based on written lab exercises. There will be two 20 point quizzes:

280	Six exams + double the highest exam	51%
80	Final (Tuesday 6 May at 11 am)	15%
25	Book report	5%
<u>160</u>	Lab Grade (120 + 40)	30%
545	Total Possible Points	

Your grade will be assigned according to your total points: A > 491; B > 436; C > 382; D > 327; F < 327.

LABORATORY OUTLINE

Laboratory meets Tuesday, 8:00-10:40 (Section 001), in Sci 212; or Thursday, 8:00-10:40 (Section 002) in Sci 212.

Attendance is mandatory.

Jan	14/16	Mineral identification
	21/23	Tectonics
	28/30	MINERAL QUIZ; Introduction to topographic maps
Feb	4/6	*Igneous rock field trip*
	11/13	*Sedimentary rock field trip *
	18/20	Igneous rock identification
	25/27	Sed & Met rock id
Mar	4/6	*Metamorphic rock field trip*
	18/20	Earthquake exercise
	25/27	ROCK IDENTIFICATION QUIZ; Streams, stream valleys, & gradients
Apr	1/3	Groundwater
	8/10	OPEN DATE-No Lab
	15/17	Alpine and continental glaciation
	22/24	Shorelines

There will be no makeup labs. **Absence from more than 2 labs will be considered grounds for dropping any student from the roll.**

* Field trip in USCA vehicles. Come in comfortable walking shoes and play clothes.