History of the Earth: Geology 105

MWF 12:00-12:50 PM

That some people are frightened by geological time and that more find it difficult to grasp its immensity may well be related to a sense of human mortality, to the comparative brevity of our own lives. One of the great values of paleontology is that it enables us to live in our own complex minds not just a few score years but more than three billion years of life history.

- **George Gaylord Simpson, 1902-1984**

INSTRUCTORS: **Dr. Mitchell Colgan**
Ms. Robin Humphreys

TEXTBOOK: Wicander and Moore, 2007. **Historical Geology - Evolution of Earth and Life Through Time 5th ed.** Brooks/Cole. pp. xv + 440. You will be assigned review questions for each chapter. For each exam, at least 15% of the questions will be from the review questions at the end of the chapter. The books companion site is very useful http://www.brookscole.com/cgi-wadsworth/course_products_wp.pl?fid=M20b&product_isbn_issn=0534392873&discipline_number=30

OTHER READINGS: I will be posting additional readings on WebCT. You will be responsible for the material in these readings, and exam questions will be drawn from these readings. The readings will be discussed during the twice weekly discussion sessions.

DISCUSSION SESSIONS: Discussion and review sessions will be held twice a week: 3:00-4:00pm on Tuesdays and 5:30 – 6:30 on Thursdays, in Rm 121 in the Science Center. During these sessions, we will not only review the topics from Dr. Colgan's lectures, but also discuss the readings from the text and WebCT. Questions from the end of the chapter reviews will also be including in our discussions. Strategies for active learning while studying and reading your text and other materials, how to take note effectively, efficient studying and advance preparation for exams, as well as other learning tactics that will help you during this course will also be integrated into these sessions.

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GRADING POLICY: There will be 3 exams given during class hours, and a final. All exams will be worth 100 points each. The final will be worth 120 pts. The final will emphasize information from the last lectures, but the final will also contain selected questions covering material studied during the entire the class (approximately 20%). Several short pop quizzes are given without warning.

Tasks	Final Grade %
Three exams	70
Final test	25
Pop quizzes and Attendance	5

A >91 A- >90 B+ > 87 B > 81 B- > 79 C+ > 78 C > 70 C- > 69 D > 60 F< 60

EXAMS: Every student will take the exams at the scheduled time. **NO MAKEUP EXAMS WILL BE GIVEN WITHOUT A VALID EXCUSE** (e. g., doctor's note). All makeup tests will be essays.

ATTENDANCE POLICY: You are expected to attend all class meetings. Roll is taken daily. **A student with more than four unexcused absences will be dropped from the class**.

OFFICE HOURS: My office hours are ether Tuesdays and Thursday between 8:00 and 10:00 or by appointment. You can always speak to me after class. My office is in Room 339 B (Geology Office) in the Science Center. You can e-mail me at either mcolgan@loki.cofc.edu or colganm@cofc.edu.

OTHER HELP: There will review sessions before each exam held during the discussion session. Also, study guides will be available on Web CT.

SPECIAL CONSIDERATIONS: If there is any student in this class who has a documented learning disability, has been approved to receive SNAP services, and has a need for accommodation, please feel free to come and discuss this with me within the first two weeks of class.

Cheating and Plagiarism: You are bound by the College of Charleston Honor Code. This means you will produce your own work and will not lie, cheat, plagiarize, steal, or attempt to do so. If you violate the Honor Code, the College Honor Board will be notified and disciplinary action, up to expulsion, will ensue.

Courtesy and Tolerance: You are also required to respect the rights of other students to learn, and the professor to teach, without undue distraction. The following activities are not permitted and may result in your being required to leave the class temporarily or permanently:

- Chatter during lecture.
- Use of laptops, personal CD or cassette players, or cell phones. Cell phones should be switched off during class.
- Reading newspapers, magazines, etc. during the lecture.
- Eating anything noisy, smelly, or otherwise distracting.
- Frequently arriving late.
- Leaving before the class ends without previously having it excused by me. Walking out early is rude, disruptive, and will be counted as an unjustified absence.

History of the Earth: Geology 105

12:00 AM – 12:50 PM: MWF

Lect	Day	Date	Subject	Chapter	Readings
1	1/9/08	W	Introduction, Overview & Uniformitarianism	Ch 1	
2	1/11/08	F	Plate tectonics + Mountain building	Ch 3	
3	1/14/08	M	Geologic Time	Ch 4	Evolution
4	1/16/08	W	Fossils, stratigraphy, and time	Ch 5	
5	1/18/08	F	Non-marine sedimentary environments	Ch 6	
6	1/21/08	M	MLK		
7	1/23/08	W	Transition sedimentary environments	Ch 6	
8	1/25/08	F	Marine sedimentary environments	Ch 6	Galapagos
9	1/28/08	M	Darwin & "Voyage of the Beagle"	Ch 7	
10	1/30/08	W	On the Origin of Species	Ch 7	
11	2/1/08	F	Evolution and fossils	Ch 7	
	2/4/08	M	TEST 1 (10)		
12	2/6/08	W	Global Change	Ch 17	Global Change
13	2/8/08	F	Cenozoic geology & Ice Ages	Ch 17	
14	2/11/08	M	Ice ages	Ch 17	Ice Ages
15	2/13/08	W	Ice ages	6-11, Ch 8	
16	2/15/08	F	Origin of the earth - Precambrian Geology	Ch 9	Evolution of the Earth
17	2/18/08	M	Paleozoic geology	Ch 10	
18	2/20/08	W	Paleozoic geology	Ch 11	
19	2/22/08	F	Mesozoic geology	Ch 14	Mountains
20	2/25/08	M	Mesozoic geology	Ch 14	
21	2/27/08	W	Cenozoic geology	Ch 16	
	2/29/08	F	Exam 2 (10)		
		M	**SPRING Break**		
22	3/10/08	M	Origin of Life	157 - 164	
23	3/12/08	W	The origin of the atmosphere	Ch 9	
24	3/14/08	F	Precambrian – Cambrian Transition	Ch 12	
25	3/17/08	M	Cambrian Fauna and Burgess Shale		Burgess Shale
26	3/19/08	W	Fishes	Ch 13	
27	3/21/08	F	The move to land	Ch 13	Tetrapod
28	3/24/08	M	Reptiles & Permian life	Ch 13	
29	3/26/08	W	Triassic Recovery - dinosaurs	Ch 15	
30	3/28/08	F	Dinosaur diversity	Ch 15	
31	3/31/08	M	Dinosaur diversity	Ch 15	Feathers
32	4/2/08	W	Dinosaur diversity	Ch 15	

	4/4/08	F	**Exam 3 (10)**		
32	4/7/08	M	Evolution of flight and birds	Ch 15	Birds
33	4/9/08	W	Origin of Mammals	Ch 15	
34	4/11/08	F	Cretaceous Extinction	Ch 15	K/T extinction
35	4/14/08	M	Mammal diversity	Ch 18,Ch 17	Whales
36	4/16/08	W	Mammal diversity	Ch 18,Ch 17	
37	4/18/08	F	Primates + Human Origins	Ch 18,Ch 17	Apes
38	4/21/08	M	Human evolution	Ch 19	Human
39	4/23/08	W	Human evolution	Ch 19	
	30-Apr	W	Final (12:00)		

Stuff you should start studying

Material for the first test - Monday, Feb. 4th

1. Geological Time Scale. Use the one on page 12
2. Taxonomic systems. See pages 139 Fig. 7.18 (Table 7.2)
   Linnean Hierarchy (Kingdom, Phylum, Class, Order, Family, Genus, Species)
   Linnean Nomenclature (Genus species e.g., Homo sapiens)
3. Geographic locations. Next section

You should be able to locate on a map.

Oceans and Seas

Arctic Ocean
Atlantic Ocean
Bering Sea
Bering Sea
Black Sea
Caribbean Sea
Chukchi Sea
Indian Ocean
Mediterranean Sea
Pacific Ocean
Red Sea

Others

Baja California
Colorado Plateau
Isthmus of Panama
Lake Baykal (Baikal)
Baja California

Mountains & Valley

Alps Mts.
Andes Mts.
Appalachian Mts
Atlas Mts
Cascade Mountain Range
Himalayas Mts
Rocky Mts
Sierra Nevada Mts
Ural Mts
Death Valley
East African Rift Valley

Rivers

Amazon River
Colorado River
Congo River
Ganges River
Mekong River
Mississippi River
Nile River

Islands

Aleutian Islands
Bora Bora
Galápagos Islands
Guam
Hawaiian Island
Honshu Island
Iceland
Indonesia
Lesser Antilles
Madagascar
Mariana Islands
New Guinea
Philippines
Society Islands

Seaways & Gulfs

Gulf of Aden
Gulf of Mexico
Persian Gulf

History of the Earth: Geology 105
Discussion Sessions
Tuesdays 3:00-4:00 PM, Rm 112, Science Center
Thursdays 5:00-6:00 PM, location TBA

INSTRUCTOR: **Ms. Robin Humphreys**
Phone: 953-7424
E-mail: humphreysr@cofc.edu - This is the best way to contact me.
Office: 124 Science Center
Office Hours: Mondays 1:00-2:30 p.m., Rm 112, Science Center, or by appointment

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History of the Earth: Geology 105 Discussion Sessions

3:00-4:00 Tues and 5:00-6:00 Thurs

Day	Date	Subject	Chapter	Readings	Learning Strategy
15-Jan	T	Uniformitarianism, Plate tectonics, Mountain building, Geologic Time, Fossils, Stratigraphy, and Time	Ch 1,3, 4,5	Evolution	Read and Remember – reading with a purpose
17-Jan	Th				
22-Jan	T	Fossils, Stratigraphy, and Time, Sedimentary Environments	Ch 4,5, 6		Noteworthy Notes – who/what/where /why/how?
24-Jan	Th				
29-Jan	T	Darwin & "Voyage of the Beagle" On the Origin of Species, Evolution and fossils, **EXAM REVIEW**	Ch 7	Galapagos	Making a Study Plan – Tips for taking Objective Tests
1-Feb	Th				
4-Feb	**M**	**EXAM 1**			
5-Feb	T	Global Change, Cenozoic geology Cenozoic geology, Ice ages	Ch 17	Global Change Readings	Active Learning: more ideas for better note-taking
7-Feb	Th				
12-Feb	T	Ice ages Big Bang to Earth Formation	pgs 6-11, Ch 8	Ice Ages	Taking notes from your readings
14-Feb	Th				
19-Feb	T	Origin of the earth - Precambrian Geology, Paleozoic geology	Ch 9,10, 11	Evolution of the Earth	Note taking: Outlines vs Mapping
21-Feb	Th				
26-Feb	T	Mesozoic geology, Cenozoic geology, **EXAM REVIEW**	Ch 14 Ch 16	Mountains	Note cards and Summaries
28-Feb	Th				
29-Feb	**F**	**EXAM 2**			
3-7 Mar	***M-F***	***Spring Break***			
11-Mar	T	Origin of Life, The origin of the atmosphere, Precambrian Transition – Burgess Shale	pgs 157 – 164, Ch 9, 12	Burgess Shale	More Tips on HOW to effectively read scientific material
13-Mar	Th				
18-Mar	T	Fishes, Amphibians, The move to land,	Ch 13	Tetrapod	Visual Organizers? What are they good for?
20-Mar	Th				
25-Mar	T	Reptiles & Permian life, Triassic Recovery Dinosaur diversity	Ch 15	Feathers	
27-Mar	Th				
1-Apr	T	Dinosaur diversity **EXAM REVIEW**	Ch 15		Charts, Trees, and Webs
3-Apr	Th				
4-Apr	**F**	**EXAM 3**			
8-Apr	T	Evolution of flight and birds, Origin of Mammals Cretaceous Extinction	Ch 15	Birds K/T extinction	Time Management and exam preparation
10-Apr	Th				
15-Apr	T	Mammal diversity	Ch 18, 17	Whales	
16-Apr	Th				
22-Apr	T	Primates + Human Origins Human evolution **EXAM REVIEW**	Ch 18,17, 19	Human	More test-taking tips and review suggestions
23-Apr	W				
30-Apr	**W**	**FINAL EXAM (12:00)**			