

# GEOLOGY 102 - HISTORICAL GEOLOGY

## SPRING 2006

*This Class and Lab are Cell-Free, Pager-Free Zones.*

Class Meets 12-12:50, MW and 12:15-1:30 TTh in Science 200.

Dr. Allen Dennis

224 Science/648-6851 x3396/dennis@sc.edu

Office Hours: MW 1-2, TTh 1:30-2:30

Other times by appointment

Texts: *Earth System History*, 2nd ed., Stanley; *Cradle of Life*, Schopf; *At the Water's Edge*, Zimmer.

Other readings as assigned.

January	9	Introduction	<b>1</b>
	10	The Rock Cycle and Plate Tectonics	<b>2, 8, 9</b>
	11	<b>Rock Types/Overprinting/Unconformities</b>	
	12	Solar System and Meteorites	<b>11</b> (thru 258), S xi-70
	16	No classes	
	17	Moon / Radiometric age dating	<b>6</b>
	18	<b>Rock Identification and Contours</b>	
	19	Test 1	S 71-138
	23	The Archean Earth: stratigraphy	258-270
	24	Archean and Archean Life	
	25	<b>Facies and Geologic Maps</b>	<b>4, 5</b>
	26	Proterozoic	<b>12</b> , S139-208
	30	Proterozoic continued	<b>12</b>
	31	Snowball Earth	
February	1	<b>Correlation</b>	<b>6</b>
	2	Test 2	S209-277
	6	Eukaryotes and Ediacara	<b>13</b>
	7	Paleomag	184-189
	8	<b>Fossils</b>	<b>14</b> , Z1-85
	9	Appalachians	
	13	Hox genes	
	14	Sequence Stratigraphy	<b>15</b>
	15	<b>Fossils and Time - dating</b>	
	16	Test 3	Z86-158
	20	Absaroka sequence	
	21	Permian Extinction	346ff, 366ff, 377ff
	22	<b>Folds and Faults</b>	
	23	Cordillera	<b>16</b> , Z159-197
	27	Dinosaurs	<b>17</b>
	28	K-T boundary extinction	<b>18</b>
March	1	<b>Igneous and Meta Rocks</b>	
	2	Test 4	Z197-237
	8-12	SPRING BREAK	
	13	Mammals	
	14	La Grand Coupure – Floral & Faunal Changes	<b>19</b>
	15	Lab Quiz	
	16	Test 5	
	20	Alpine Himalayas	
	21	Quaternary Ice Ages and Climate Change	<b>20</b>
	22	Hominids	

If you have a learning or physical disability that might affect your performance in this class, please inform me and Coordinator of Disabled Student Services, x3609, to verify your status and provide you with appropriate assistance.

**WF date for this class is Thurs 9 February. The Final is scheduled for Fri pm 24 March.**

My objective for this class is that you begin to understand the reasoning behind how we know what we know about earth history and the history of life through time. We will be very interested in how different lines of evidence are assembled to construct models of the earth in the past, and what are the assumptions of these models. You will express your understanding of lecture and lab material (i.e., lines of evidence) and assigned readings through tests and discussions biweekly. Additionally, students will post questions and respond to their classmates via a threaded discussion hosted on Blackboard.

Grading: There will be five tests. Following tests, discussions will be held on Schopf and Zimmer assigned reading. Students will be given responsibility for leading discussion, and are expected to participate. **Absence from more than one discussion will result in an F for the class.**

A threaded discussion will be hosted on the Blackboard website for this class. Each student will be responsible for initiating at least two new threads on a content area and at least three meaningful responses to posts.

Laboratory: 10 pts a week may be scored in the Laboratory, held either Wednesday or Thursday. Scores will be based on written lab exercises. A single 20 point quiz is scheduled for the last lab meeting. **Absence from more than one lab will result in an F for the class.**

150	Five biweekly tests @ 30 pts
50	Final (Friday afternoon, 24 March)
60	Discussion partic. (15 pts. for leading, 5 for each other discussion, 25 BB)
<u>100</u>	Lab Grade (10 pts/wk, 20 pt lab quiz)
360	Total Possible Points

A≥324pts, B≥288 pts, C≥ 252 pts, D≥216 pts, F≤216 pts.