

**GEOLOGY 112: HISTORICAL GEOLOGY**  
**SPRING 2008**  
**MWF 11:00-11:50 AM IN CHC 110**

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**Office Hours:** MW 12-1:00, T 2-3 and by appointment  
**Text:** *Earth System History* by Steven Stanley  
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<u>Date</u>	<u>Lecture Subject</u>	<u>Reading Assignment</u>
Jan. 14	The Earth System	Chap. 1; *Ch. 2
16	Catastrophism vs. Uniformitarianism	
18	Diversity of Life and Fossils	Chap. 3
<b>21</b>	<b>MLK Jr. Holiday</b>	
23	Environments and Life	Chap. 4
25	Sedimentary Environments	Chap. 5
<b>28</b>	<b>Quiz #1.</b> Absolute and Relative Age Dating	Chap. 6 (p. 129-138)
30	Earth's Absolute Age and the Geologic Time Scale	Chap. 6 (p. 139-152)
1	Evolution and the Fossil Record	Chap. 7
Feb. 4	Paleomagnetism and Seafloor Spreading	Chap. 8 (p. 177-189)
6	Plate Tectonics and Mountain Building	Chap. 8 (p. 190-198); Chap. 9
8	Chemical Cycles in the Earth: Carbon Cycle	Chap. 10 (p. 222-237)
11	Chemical Cycles in the Earth: Oxygen Isotopes	Chap. 10 (p. 238-244)
13	<b>Quiz #2.</b> Early History of the Earth	Chap. 11 (p. 245-258)
15	Archean: Origin of Continents, Greenstone Belts	Chap. 11 (p. 258-262)
18	<b>Presidents Day Holiday</b>	
20	Origin of Life and the early Atmosphere	Chap. 11 (p. 262-272)
<b>22</b>	<b>Exam #1</b>	
25	Early Proterozoic	Chap. 12 (p. 273-281)
27	Proterozoic Tectonics	Chap. 12 (p. 287-298)
29	Late Proterozoic Life and the Cambrian Explosion	Ch. 12 (p. 281-287) Ch. 13 (p. 299-307)
Mar. 3	<b>Quiz #3.</b> Cambrian Epeiric Seas	Chap. 13 (p. 312-315)
5	Ordovician Life	Chap. 13 (p. 309-312)
7	Ordovician Mountain Building	Chap. 13 (p. 315-326)
10	Mid-Paleozoic Life	Chap. 14 (p. 327-342)
12	Mid-Paleozoic Mountain Building	Chap. 14 (p. 343-354)
14	Late Paleozoic	Chap. 15 (p. 355-386)

<u>Date</u>	<u>Lecture Topic</u>	<u>Reading Assignment</u>
17	Late Paleozoic Extinctions	Chap. 15 (p. 372-375)
<b>19</b>	<b>Exam #2</b>	
<b>21</b>	<b>Good Friday Holiday</b>	
<b>24-28</b>	<b>Spring Break Holiday</b>	
31	Continental Breakup in the Early Mesozoic	Chap. 16 (p. 404-416)
2	Rise of the Dinosaurs	Chap. 16 (p. 387-404)
4	The Cretaceous	Chap. 17 (p. 417-444)
7	Life in the Mesozoic	Chap. 17 (p. 417-428)
9	Cretaceous Climate and Tethys	
11	Late Cretaceous Extinctions	Chap. 17 (p. 433-437)
<b>14</b>	<b>Quiz #4. Cenozoic of the Western US</b>	Chap. 18 (p. 460-468)
16	Cenozoic Life and Mammal Evolution	Chap. 18 (p. 445-455)
18	Cenozoic of the Western U.S.	Chap. 18 (p. 413-432)
21	Pacific and Eurasian Tectonics	Chap. 19 (p. 488-502)
23	Cenozoic Climate	Chap. 18 (p. 455-460) Chap. 19 (p. 477-488)
<b>25</b>	<b>Exam #3</b>	
28	Human Evolution	Chap. 19 (p. 502-514)
30	The Holocene Extinctions	Chap. 20 (p. 515-525)
May 2	Sea Level and Climate Change in the past 10,000 yrs.	Chap. 20 (p. 525-532)
May 5	Impact of Humans and Pseudoscience	Chap. 20 (p. 532-540)
7	Review and Wrap	
<b>May 14</b>	<b>Final Exam 9:40-11:40 AM</b>	