

EARTH AND LIFE THROUGH TIME
(Fulfills Sector VI, Physical World, Distributional Requirement
and College Quantitative Data Analysis Requirement)

01. Mo	Jan 13	Earth Systems, Deep Time, The Present is a Key to the Past,	S-1
02. We	15	Rocks have many origins and uses	G-1, S-2
(Recitations begin on Monday, January 27)			
	Mo 20	Martin Luther King Day (no class)	
03. We	22	Moving Continents and Vanishing Oceans	S-8
04. Mo	27	Plate Tectonics, Mountain Building	S-8-9
05. We	29	Diversity of Life	G-Appendix, S-3
06. Mo	Feb 03	Environments and Life	S-4
07. We	05	What gets preserved? What gets removed?	S-5
08. Mo	10	Fossil Record: Observation and Common Sense	G-8
09. We	12	How to date a rock	G-3-6, S-6
10. Mo	17	Changes in Life Through Time	S-7
11. We	19	Evolution	S-7
12.. Mo	24	Recycling in Nature	S-10
13. We	26	Early Earth	S-11
	Mo Mar 04	MIDTERM EXAM	
14. We	05	Early Life and Snowball Earth	S-12
SPRING RECESS March 08 - March 16			
15. Mo	17	"Explosion" of Life in the Sea	S-13
16. We	19	Invasion of the Land	S-14
17. Mo	24	Forests and Flight: Late Paleozoic	S-15
18. We	26	Why Ice Ages? Do we live in an Ice Age?	TBA
19. Mo	31	First Dinosaurs: Triassic, Jurassic	S-16
20. We	Apr 02	Last Dinosaurs: Cretaceous	S-17
21. Mo	07	End Cretaceous Mass Extinction, Meteorite Impact	S: 482-486
22. We	09	Origin of Modern Animals: Early Cenozoic	S-18
23. Mo	14	Origin of Modern World: Late Cenozoic	S-19
24. We	16	Experiments in Earth History	TBA
25. Mo	21	Human Origins	S: 549-556
26. We	23	Our Interglacial and Earth's Future	S-20

FINAL EXAM: Wednesday, May 7, 8:30-10:30

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TAs: Barbara GRANDSTAFF, 451 Hayden Hall, Tel: 3-8372, grandsta@PHL.VET.UPENN.EDU; office hours: by appointment

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Lec. Mo + We 11-12, 110 Annenberg

Recitation: Mo 1 (Freshmen Seminar) or Tu 9:30 or We 2 or 3 or R 3, 358 Hayden Hall

REQUIRED READINGS:

(S) Stanley, S.M. 1999. Earth System History. Freeman, New York, 615 p. (chapters given or page numbers)

(G) Gastaldo, R.A., Savrda, C.E. & Lewis, R.D. 1999. Deciphering Earth History. A Laboratory Manual with Internet Exerc. 2nd ed. Contemporary Publ., Raleigh, NC. (used in Recitation as lab book)

Grading: Midterm 25%; Final 50%; Recitations 25%