

The Evolution and Paleobiology of Dinosaurs

Geology 12

Winter Quarter, 2017

Tuesday and Thursday, 12:10 - 1:00 PM

1001 Giedt Hall

Credit: 2 units

Prerequisites: none

Grading: letter grade

Instructor: Sandy Carlson **Telephone:** 2-2834 **E-mail:** sjcarlson@ucdavis.edu

Office Hours: Tuesday & Thursday 1:30-2:30 pm or by appt., Rm. 2123 Earth & Physical Sciences Bldg.

Required Text: *Dinosaurs: a Concise Natural History* by D.E. Fastovsky and D.B. Weishampel, 3rd Edition, 2016, Cambridge University Press, Cambridge. 432 pp.

Requirements: One midterm exam (45%) and a final, cumulative exam (55% of grade).

Web site:

Date	Lecture	Reading: Chapters
January 10	Introduction to Dinosaurs: History of study	15
January 12	Dinosaurs in Temporal Perspective: Geological time	2
January 17	Geology and Climate in the Mesozoic Era	2
January 19	Collecting Dinosaurs: How is it done?	1
January 24	Dinosaur Ancestors: Who are they?	3, 4, and 5
January 26	Dinosaur Relationships I: Saurischia	6, 7, and 9
January 31	Dinosaur Relationships II: Ornithischia	10, 11, and 12
February 2	Dinosaur Biomechanics I: Postcranial	Review 6-7, 9-12
February 7	Dinosaur Biomechanics II: Dental and cranial	Review 6-7, 9-12
February 9	MIDTERM: during class time, in 1001 Giedt Hall	-----
February 14	Pterosaurs	-----
February 16	The Origin of Birds	8
February 21	Dinosaur Physiology I: Endothermy Hypothesis	13
February 23	Dinosaur Physiology II: Testing the Hypothesis	13
February 28	Dinosaur Behavior I: Functional Morphology; Trackways	Review 6-12
March 2	Dinosaurs Behavior II: Reproductive Behavior	Review 6-12
March 7	Life in Mesozoic Seas: Marine Reptiles	-----
March 9	Hot New Topics in Dinosaur Paleobiology	14
March 14	Dinosaur Extinction I: Hypotheses	16
March 16	Dinosaur Extinction II: Testing the Hypotheses	16
March 22	FINAL EXAM: 1:00 to 3:00 pm in 1001 Giedt Hall	