

# The Evolution and Paleobiology of Dinosaurs

## Geology 12

Winter Quarter, 2019

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

1001 Giedt Hall

**Credit:** 2 units

**Prerequisites:** none

**Grading:** letter grade

**Instructor:** Sandy Carlson    **Telephone:** 752-2834    **E-mail:** sjcarlson@ucdavis.edu

**Office Hours:** Tuesday & Thursday 10:30-11:30 am or by appt., Rm. 2123 Earth & Physical Sciences Bldg.

**Recommended 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).

Date	Lecture	Reading: Chapters
January 8	Introduction to Dinosaurs: History of study	15
January 10	Dinosaurs in Temporal Perspective: Geological time	2
January 15	Geology and Climate in the Mesozoic Era	2
January 17	Collecting Dinosaurs: How is it done?	1
January 22	Dinosaur Ancestors: Who are they?	3, 4, and 5
January 24	Dinosaur Relationships I: Saurischia	6, 7, and 9
January 29	Dinosaur Relationships II: Ornithischia	10, 11, and 12
January 31	Dinosaur Biomechanics I: Postcranial	Review 6-12
February 5	Dinosaur Biomechanics II: Dental and cranial	Review 6-12
February 7	<b>MIDTERM:</b> during class time, in 1001 Giedt Hall	-----
February 12	Pterosaurs	-----
February 14	The Origin of Birds	8
February 19	Dinosaur Physiology I: Endothermy Hypothesis	13
February 21	Dinosaur Physiology II: Testing the Hypothesis	13
February 26	Dinosaur Behavior I: Functional Morphology; Trackways	Review 6-12
February 28	Dinosaurs Behavior II: Reproductive Behavior	Review 6-12
March 5	Life in Mesozoic Seas: Marine Reptiles	-----
March 7	Hot New Topics in Dinosaur Paleobiology	-----
March 12	Dinosaur Extinction I: Hypotheses	14 and 16
March 14	Dinosaur Extinction II: Testing the Hypotheses	16
March 22	<b>FINAL EXAM:</b> 3:30 to 5:30 pm in 1001 Giedt Hall	