

Videotaped lectures and accompanying notes and other materials examine the historical evidence and illustrate how various geological and biological specialties contribute to understanding dinosaurs and their world.

Classes will be conducted via the Winter 2019 EAS 1109 Blackboard site*, so please make sure you are familiar with Blackboard. Everything you'll need, including lecture materials and tests, will be available there.

Questions and class discussions will be conducted using Blackboard's Discussion Board feature so that everyone will have access to the proceedings. Asking questions and joining in discussions of the answers makes for a good class. Please don't be shy.

Required reading: *Lecture notes and PowerPoints on Blackboard**.

Recommended reading / reference / security blanket: Spencer G. Lucas, *Dinosaurs: The Textbook*, 6th Edition (Columbia University Press, 2016). *Wikipedia* is becoming an increasingly reliable source. *Tree of Life* (www.tolweb.org) is more dependable and authoritative, but also more technical (links included on Blackboard). EAS 1109 has its own Facebook Group whose page features the few years' compilation of daily news and commentary on dinosaurs and the history of life (<https://www.facebook.com/groups/1501183123521716/>).

Grades will be based on each student's top three out of four test scores, with letter grades curved to the totals. Test scores seem to be widely regarded as low, but letter grades, as generous and forgiving. Tests, like other material, will be cumulative; but Tests 1-3 each will concentrate on the group of lectures immediately preceding. Keys to past semesters' tests are posted on Blackboard to give an idea of what to expect. Thoughtful participation in Discussion Board proceedings is appreciated.

Exams are spaced to help you distribute your work over the three-week session, but otherwise please feel free to work at your own pace. Students will be on their honor to follow Cornell's *Code of Academic Integrity*.

CLASS* **TOPIC**, with recommended reading by chapter in *Dinosaurs: The Textbook*

Test 0: Strictly for fun, to familiarize everyone with the course and with Blackboard tests

- 1 **Introduction:** Questions About Dinosaurs — An overview of the course. How can it contribute to a liberal education? *Recommended:* Look over *Dinosaurs: The Textbook*, especially 1, 11, 17
- 2 **Putting Dinosaurs in Historical Perspective** — What's behind the conclusion that an asteroid impact ~66 million years ago precipitated the K/T mass extinction, and that dinosaurs survived to become today's most diverse terrestrial vertebrates? *Dinosaurs: The Textbook* 2, 3, 12
- 3 **How it All Began** — Life's origin, its history in the ocean, and the "Cambrian Explosion"
Dinosaurs: The Textbook 3
- 4 **Life Invades the Land** — The dinosaurs' world takes shape, the original Green Revolution.
Dinosaurs: The Textbook 3, 4

Test 1: Open Notes, 15 Minutes, 12:01 AM† Saturday the 5th – 11:59 PM† Monday the 7th

- 5 **The Dinosaur Family Album I** — Sauropsids' diversification. *Dinosaurs: The Textbook* 4
- 6 **The Dinosaur Family Album II** — Dinosaurs' diversification. *Dinosaurs: The Textbook* 4, 5, 14
- 7 **The Dinosaur Family Album III** — Theropods, Sauropodomorphs. *Dinosaurs: The Textbook* 5, 6, 15
- 8 **The Dinosaur Family Album IV** — Sauropods, early Ornithischians. *Dinosaurs: The Textbook* 6-8
- 9 **The Dinosaur Family Album V** — Later Ornithischians. *Dinosaurs: The Textbook* 7, 9

Test 2: Open Notes, 15 Minutes, 12:01 AM† Friday the 12th – 11:59 PM† Sunday the 14th

- 10 **More Questions About Dinosaurs** — How smart? How fast? What color? How do we know?
Dinosaurs: The Textbook 12, 13, 16
- 11 **The Mesozoic World** — Plate tectonics and continental drift; the atmosphere, ocean, and climate through time — and what they have to do with sauropods' viability and the price of gasoline?
Dinosaurs: The Textbook 10
- 12 **What Happened AFTER the K/T Event?** — What about birds, and what about us mammals?
Dinosaurs: The Textbook 5, 14-16
- 13 **The Latest Mass Extinctions** — *Dinosaurs: The Textbook* 16

Tests 3 and 4: Open Notes, 15 minutes each, 12:01 AM† Friday the 18th – 11:59 PM† Sunday the 20th

*Videotapes of the lectures should be accessible through Blackboard by 26 December 2018.

†Eastern Standard Time. Please make sure to allow for any difference in time zone.