

GEL 261: Fall 2017

Paleontology Seminar: Body size in evolution and ecology

When and Where? Tuesday & Thursday 12:10-1:30 PM; 2230 Earth and Physical Sciences Bldg.

Instructor: Sandy Carlson, sjcarlson@ucdavis.edu, 752-2834

Office Hours: By appointment, 2123 Earth and Physical Sciences Bldg.

WEEK	TOPIC	Possible topics:
9/28	Introductions; settle on day and time	allometry
Week 1:		WBE debate
10/3	discussion	ontogeny
10/5	discussion	heterochrony
Week 2:		ecology
10/10	discussion	physiology
10/12	discussion	biogeography
Week 3:		function/adaptation
10/17	discussion	physics of scaling
10/19	discussion	sexual dimorphism
Week 4:		extinction
10/24	No class Tuesday – Geological Society of America meetings	biodiversity
10/26	meet with enrolled students to discuss individual projects	others
Week 5:		
10/31	ELI Cand. 1; discussion	
11/2	ELI Cand. 2; discussion/projects	
Week 6:		
11/7	discussion	
11/9	ELI Cand. 3; discussion/projects	
Week 7:		
11/14	ELI Cand. 4; discussion	
11/16	ELI Cand. 5; discussion/projects	
Week 8:		
11/21	work on projects	
11/23	No class Thursday – Thanksgiving	
Week 9:		
11/28	discussion	
11/30	work on projects	
Week 10:		
12/5	Student presentations of projects	
12/7	Student presentations of projects	

We will meet for two, 1.5 hour class periods each week — the first devoted to a discussion of papers/book chapters relevant to the week's topic, and the second devoted to developing and working on your own project that has some relationship to body size and scaling in evolution and ecology, or beyond. We will incorporate some of the research of the Earth/Life Interaction faculty candidates that we bring in this fall into our seminar as well.

Each enrolled student will:

Read the papers assigned and come to class ready to discuss them, with vigor!

Lead at least one class discussion over the course of the quarter, possibly more than one.

Complete a small research project on an idea of your choice, related to the topic.

Write a paper of no more than 5 pages total, single-spaced, on the project (more details to follow).

Present the project to the group orally in a roughly 10-15 minute presentation.