

THE OHIO STATE UNIVERSITY
School of Earth Sciences

EARTH SCIENCES 614
PALEOBIOLOGY

Instructors: William I. Ausich
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Instructors: Loren E. Babcock
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Office Hours: 11:30-12:30 M, W, F

Lectures: M, T, W, R 2:30-3:18 80 Orton Hall
Laboratories: F 1:30-3:18 80 Orton Hall

Textbook: Feldmann, R.M. (ed.). 1996. Fossils of Ohio. Ohio Division of Geological Survey, Bulletin 70, 577 p.

COURSE SCHEDULE

Sept 19 -A- Introduction, Margulis, etc.
Sept 20 -A- Systematics
Sept 21 -A- Systematics; LAB: Caminacules

Sept 24 -A- Making a living on the ocean floor
Sept 25 -A- Functional morphology of colonial organisms – Bryozoa
Sept 26 -A- Functional morphology of colonial organisms – Bryozoa
Sept 27 -A- Brachiopods – A New Taxonomy
Sept 28 -A- LAB: Rarefaction techniques

Oct 1 -A- Brachiopods – A New Taxonomy
Oct 2 -A- Evolution of the Echinoderm Bauplan
Oct 3 -A- Functional Morphology of Crinoids
Oct 4 -A- Morphologic vs Molecular Phylogeny in Echinoids
Oct 5 -A- Mesozoic Marine Revolution

Oct 8 -A- Allometry and Constructional Morphology
Oct 9 -A- Stable Isotopes and Molluscs
Oct 10 -A- Stable Isotopes and Molluscs
Oct 11 - FORT PAYNE FIELD TRIP
Oct 12 - FORT PAYNE FIELD TRIP

Oct 17 -A- Diversity through time
Oct 16 -A- Diversity through time
Oct 15 -A- Mesozoic Marine Revolution
Oct 18 - **LECTURE MIDTERM EXAMINATION**
Oct 19 -A- LAB: Macroevolutionary Trends through the Phanerozoic

Oct 22 -B- Evolution
Oct 23 -B- Macroevolution
Oct 24 -B- Divergence of Animals
Oct 25 -B- PreCambrian paleontology
Oct 26 -B- LAB: Preparation Techniques

Oct 29 - GSA: Work on Paleobiology Paper
Oct 30 - GSA: Work on Paleobiology Paper
Oct 31 - GSA: Work on Paleobiology Paper
Nov 1 - GSA: Work on Paleobiology Paper
Nov 2 -A- LAB: Photographic Techniques

Nov 5 -B- PreCambrian paleontology
Nov 6 -B- PreCambrian paleontology/Ediacaran
Nov 7 -B- Trace Fossils
Nov 8 -B- Phylogenetics
Nov 9 -B- LAB:Phylogeny

Nov 12 - NO CLASSES – Veteran's Day
Nov 13 -B- Phylogenetics
Nov 14 -B- Divergence of Arthropods
Nov 15 -B- Classification versus Phylogeny
Nov 16 -B- LAB:Phylogeny

Nov 19 -B- Classification versus Phylogeny
Nov 20 -B- Arthropods
Nov 21 -B- Arthropods
Nov 22 -No Classes Thanksgiving
Nov 23 -No Classes Thanksgiving

Dec 26 -B- Arthropods
Dec 27 -B- Taphonomy
Dec 28 -B- Taphonomy
Dec 29 -B- Taphonomy
Dec 30 -B- LAB:Phylogeny

December, 6, Thursday, FINAL LECTURE EXAMINATION (11:30 - 1 :18 a.m.)

Purpose of Course: Advanced consideration of topics and methodology in current research on the morphology, phylogeny, paleoecology, taphonomy, biogeography, and interactions of major groups of macroinvertebrate fossils.

Gradable Items: The Midterm will cover material studied through Arthropods. The Final Exam will focus on, but not be restricted to, materials covered after the midterm. In addition there will be several graded laboratories, lecture assignments, and one written paper. The paper is one on any topic of Paleobiology. Your final grade will be based on Midterm (25%), Final Exam (30%), Lab Exercises (15%), Lecture Exercises (15%), and Paleobiology Paper (15%). The first draft of the Paleobiology Paper is due November 15, 2005, and the final draft is due December 2, 2005.

ACADEMIC MISCONDUCT

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentaffairs.osu.edu/info_for_students/csc.asp>.

DISABILITY SERVICES

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; 292-3307, TDD 292-0901; <<http://www.ods.ohio-state.edu/>>.