

**EVOLUTION OF THE EARTH (HISTORICAL GEOLOGY) 109, 4 CREDITS, Spring 2012.
LECTURE AND LAB SYLLABUS**

Instructors: Joseph E. Peterson 920-424-4463 petersoj@uwosh.edu www.jptaphonomy.com

Office: Harrington Hall 211, Office Hours: 10:20-11:20 MW

Texts: Lecture: Prothero & Dott, *Evolution of the Earth*, 8th Ed.
Lab: Frey et. Al., *Earth History*
Supplementary Lab Text: (Available at book store)

Class Hours:

	Time	Days	Locations	Instructor
Lecture:	1:50-2:50	MWF	Halsey 109	Dr. Joseph Peterson
Lab 1:	12:40-2:50	W	Harrington 114	Dr. Joseph Peterson
Lab 2:	3:00-5:10	W	Harrington 114	Dr. Joseph Peterson
Lab 3:	8:00-10:10	TH	Harrington 114	Dr. Eric Hiatt
Lab 4:	10:20-12:30	TH	Harrington 114	Dr. Eric Hiatt

Course Objectives:

- 1) Learn the history and development of geological science and fundamental stratigraphic principles. Understand the scientific method and be able to understand and evaluate multiple working hypotheses.
- 2) Develop a general understanding of sedimentologic, stratigraphic, and paleontologic concepts required to decipher Earth history.
- 3) Gain an understanding of global processes and their impact on the shaping of the Earth.
- 4) Learn the basic geological history of the Earth with emphasis on North America. Learn the basic history and evolution of life.

Exams and Quizzes:

Lecture Exams: There will be 4 non-comprehensive exams that will consist of a multiple choice section and a written essay section. Exams are worth ~70 points each.

Lecture Quizzes: Lecture quizzes are extra credit and worth up to 5 points. These quizzes will be given at random. *No makeup lecture quizzes will be allowed.*

Lab Quizzes: There will be 5 non-comprehensive lab quizzes worth ~ 30-40 points each. Quizzes will consist of rock, mineral, and fossil identification, written essay, and problem-solving techniques.

Grading:

Scores will not be curved. Letter grades will be assigned as follows: A (100-90%), B (89-80%), C (79-70%), D (69-60%), F (<60%). Attendance will be kept by random pop quizzes.

Make Up Policy:

No make-up exams or assignments will be permitted without a valid, pre-arranged excuse. **ALL** absences due to illness will require a doctor's note in order to make up missed assignments, labs, or tests. If you are unable to make an exam, you **MUST** contact me **BEFORE** the exam is given via email, phone, etc.

Field Trip:

A 1 day field trip to Baraboo and subsequent quiz is a required part of this course. The date for the trip will be announced ASAP. Students who are unable to attend the field trip (e.g. physical disability) will be allowed to gain equivalent credit by writing a term paper. ***Arrangements must be made in advance. Over-sleeping, missing the bus, etc are NOT acceptable excuses for missing the field trip. If you know you will not be able to attend the trip, you need to make arrangements with me PRIOR to the date of the field trip. No exceptions!***

109 Lecture Schedule. Spring 2012 (subject to change)

Text: Prothero & Dott, Evolution of the Earth, 8th Ed.

Week 1 (1/30-2/3)	Chapter 1: Time and terrestrial change, Chapter 2: Floods, fossils and heresies
Week 2 (2/6-2/10)	Chapter 3: Evolution
Week 3 (2/13-2/17)	Chapter 4: Relative age dating & stratigraphy, Chapter 5: Numerical age dating
Week 4 (2/20-2/24)	Exam 1 , Chapter 6: Origin & Evolution of the Early Earth
Week 5 (2/27-3/2)	Chapter 7: Mountain building and plate tectonics
Week 6 (3/5-3/9)	Chapter 8: Cryptozoic History, Chapter 9: Early Life Patterns
Week 7 (3/12-3/16)	Chapter 10: Proterozoic History, Exam 2
Week 8 (3/19-3/23)	<i>Spring Break</i>
Week 9 (3/26-3/30)	Chapter 11: Early Paleozoic
Week 10 (4/2-4/6)	Chapter 12: Middle Paleozoic
Week 11 (4/9-4/13)	Chapter 13: Late Paleozoic, Exam 3
Week 12 (4/16-4/20)	Chapter 14: Mesozoic History
Week 13 (4/23-4/27)	Chapter 15: Cenozoic History
Week 14 (4/30-5/4)	Chapter 16: Pleistocene Climates, Global Climate Change
Week 15 (5/7-5/11)	Chapter 16: Human Evolution, Exam 4

109 Lab Schedule. Spring 2012 (subject to change)

Text: Frey et al., Earth History and Supplementary Lab Text

Week 1 (1/30-2/3)	Intro to rocks and minerals: Supplementary Lab Text p. L-1
Week 2 (2/6-2/10)	Sedimentary Rocks: Earth History ch. 1, 2 + Supplementary Lab p. L-16
Week 3 (2/13-2/17)	Quiz 1 + Intro to fossils, Earth History, ch. 3
Week 4 (2/20-2/24)	Stratigraphic Principles, Earth History, ch. 4,6
Week 5 (2/27-3/2)	Topographic and geological maps, Earth History, ch. 7
Week 6 (3/5-3/9)	Quiz 2
Week 7 (3/12-3/16)	Construction of geologic maps, Earth History, ch. 13
Week 8 (3/19-3/23)	Spring Break
Week 9 (3/26-3/30)	Prep. For Baraboo Trip (tentative), Supplementary Text p. L-20
Week 10 (4/2-4/6)	Quiz 3 + Early Paleozoic Fossils, Earth History, ch. 8
Week 11 (4/9-4/13)	Late Paleozoic Fossils, Earth History, ch. 9
Week 12 (4/16-4/20)	Paleozoic Fossils Quiz (4)
Week 13 (4/23-4/27)	Mesozoic Fossils, Earth History, ch. 10, Supplementary Text p. L-65
Week 14 (4/30-5/4)	Cenozoic Fossils, Earth History, ch. 11
Week 15 (5/7-5/11)	Mesozoic-Cenozoic Fossils Quiz (5)

Labs attendance is mandatory. If you miss a lab, **YOU MAY NOT ATTEND ANOTHER SECTION WITHOUT PRIOR DISCUSSION WITH THE LAB INSTRUCTOR. NO EXCEPTIONS!**