

# Physical Geology 51-102 Lecture: Spring 2006 (4 credits)

Section: A09C

**Instructor:** Dr. Eric Hiatt

**Office:** Harrington Hall 310

**E-mail:** [hiatt@uwosh.edu](mailto:hiatt@uwosh.edu)

**Phone:** (920) 424-7001

**Office hours:** 3:00-4:00 M,W,F; 10:20-11:20 W & F, and by appointment or chance.

**Class Schedule:** Lectures: MWF 11:30-12:30 PM, Halsey 106.

**Important Dates:** Spring Break, March 12-19; Semester end, May 12.

<b>Grades:</b>	
4 Lecture Exams	60%
Laboratory Grade*	35%
In-Class Exercises**	5%

**\*Note:** You must attend the lab to pass the course, and you must pass the laboratory portion of the course to receive a passing grade in the overall course.

**\*\*In-Class exercises** will include written answers to questions, and interpretive sketches based on photos shown to the class.

**Grade scale:** 92% and up = A; 87-91 = AB; 82-86 = B; 77-81 = BC; 72-76 = C; 67-71 = CD; 60-66 = D; <60% = F

**Exams:** The lecture exams will be weighted equally, can cover material from lab, and will be in an objective multiple-choice format. **Bring a #2 pencil and YOUR STUDENT I. D. to each exam.**

**The tentative exam schedule is:**      **Exam 1 February 24**

Exam 2 March 24

Exam 3 April 14

Exam 4 May 10

**Attendance:** The **material on the exams will come from the lecture and lab** so attendance in both is required if you wish to do well in the course. Please feel free to ask questions at **ANY** time, including during lecture. If you have a valid excuse and must miss an exam, contact me **BEFORE** the exam date. If you have a valid excuse, you may take a makeup exam.

**Special Accommodations:** Reasonable accommodations will be made for students with disabilities. Please contact Disability Services (424-3100 (voice) or 424-1319 (TTY)) or visit their web site at <http://www.uwosh.edu/dean/disabilities.htm> for the University's accommodation request form and documentation requirements. Information related to an individual's accommodation request will be kept confidential.

**Academic Integrity:** The Wisconsin Administrative Code states: "Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others academic endeavors." (§ UWS 14.01) Plagiarism and other forms of academic misconduct are serious offenses with severe penalties. See the [University of Wisconsin Oshkosh Student Discipline Code](#) for definitions of academic misconduct and details about procedures, sanctions, and other relevant

information. Specific questions about the provisions in the Student Discipline Code should be directed to the Dean of Students Office. If you do not understand this statement, please see me as soon as possible.

**Required text:** [Physical Geology](#), 2006, 11th edition by Plummer, McGeary, and Carlson, McGraw Hill Publisher.

**Required lab manual:** [Laboratory Manual for Physical Geology](#), 2006, 5th edition by Jones and Jones, McGraw Hill Publisher.

**Note: a used lab manual is NOT acceptable!**

**Purpose of this course:** Physical Geology involves study of the Earth. You may not realize how important understanding the Earth is in everyday life, but most of our energy resources come from the Earth, including petroleum, coal, and uranium, as well as all metals (iron, copper, lead, zinc, etc.). Soil is made up of weathered rock. Groundwater comes from the Earth and is directly affected by the surrounding rock and soil. Many of the wars throughout history, either directly or indirectly, have been fought over resources, such as petroleum. Understanding how the Earth works is critical to make land use and global political decisions. For all of these reasons, study of Physical Geology is part of a well-rounded liberal arts education. It is your responsibility as an educated member of a democracy to have a basic understanding of how the world works in geologic terms, as well as an understanding of social, political, and societal aspects of the world.

## Physical Geology Lecture Schedule: Spring 2006

Week of:	Topic and readings:	Chapter in Text
Jan. 30	Introduction to science and scientific inquiry; Geology-study of Earth; <a href="#">overview of how planet Earth is constructed</a> .	Chp. 1 (& 19)
Feb. 6	<a href="#">Plate tectonics overview</a> ; <a href="#">Atoms, compounds, and minerals</a> .	Chps. 1 & 2
Feb. 13	Rocks & plate tectonics; Igneous rocks and formation of magma.	Chp. 3
Feb. 20	Volcanoes; <b>Exam 1</b> .	Chp. 4
Feb. 27	Weathering, soils and global chemical cycles.	Chp. 5
March 6	Reading the history of life: Sedimentary rocks; Interpreting sedimentary rocks.	Chp. 6
March 13	Spring Break!	Read Chp. 7
March 20	Metamorphism and metamorphic rocks; <b>Exam 2</b> .	Chp. 7
March 27	The vastness of geologic time; Relative age determinations. Quantitative age determinations; The hydrologic cycle.	Chps. 8 & 10
April 3	Streams and floods; Groundwater.	Chps. 10 & 11
April 10	Glaciation; <b>Exam 3</b> .	Chp. 12
April 17	Climate change, and paleoclimates.	Chp. 12
April 24	Plate tectonics II: geologic structures (stress, strain, folds and faults).	Chps. 15 & 19
May 1	Earthquakes and the Earth's interior; Earth resources.	Chps. 16, 17 & 21
May 8	Earth resources: coal, gas, petroleum & minerals; Review, <b>Exam 4</b> .	Chp. 21