PHYSICAL GEOLOGY (GEOLOGY 102)
Course Syllabus Spring, 2004
MWF 11:30-12:30 Halsey 106

Instructor: Dr. Jennifer Wenner
Office: Harrington 107
Email: wenner@uwosh.edu
Phone: 424-7003

Office Hours: M 8-10, M 3-4, T 10:20-11:30, T 1:50-2:50, W 1:50-2:50 and by appointment.

Texts: Marshak, Stephen, 2001, *Earth: Portrait of a Planet*, First Edition, W. W. Norton & Co., New York, NY, 735 p.

American Geological Institute, National Association of Geoscience Teachers, 2002, *Laboratory Manual in Physical Geology*, Sixth Edition, Richard M. Busch, *Editor,* Prentice-Hall, Upper Saddle River, NJ, 288 p.

COURSE GOALS

Geology is like a detective story and my goal is to teach you about the questions you can ask in order to understand the way that the Earth works. A detective learns things through observation and deductive reasoning. You will become Earth detectives, learning how to observe and think about processes and forces acting on the Earth and to critically evaluate the evidence in support of those processes. Hopefully, you will learn the ways in which we, as humans, can change the face of the Earth and how we can make decisions that may prevent detrimental changes from taking place. You will also learn ways in which forces bigger than all of us and out of our control shape the Earth as we know it and how they shaped the Earth billions of years ago. Geology is scientifically unique because it draws on our knowledge of the physical, chemical, mathematical and biological world to help us to say something about the world we live on. So, no matter what your background, you have something to contribute to the class. This is part of the reason many of the people who study geology find it so fascinating.

GRADING and EXPECTATIONS

Your grade will be based on four exams, the laboratory component and participation in class.

Exam 1	15%
Exam 2	15%
Exam 3	15%
Exam 4	15%
Laboratory	35%
Participation	5%
Total	100%

EXAMS will include all chapters listed in the syllabus up to the date of the review session (see below). The exams will consist of multiple-choice questions about any of the topics we have covered in lecture or lab – be prepared for questions from any chapter up to that point. THERE ARE NO MAKE-UP EXAMS.

The LABORATORY component of this course is extremely important. Lab is where you learn practical skills and apply concepts you have learned in class. Therefore, attendance in lab is **mandatory**. YOU MUST RECEIVE A PASSING GRADE IN LAB TO PASS THIS COURSE!

CLASS PARTICIPATION is difficult in large survey courses like this one. However, active engagement in any course is an important part of your education no matter the size of the class. Therefore, once a week, you must take a 10-point quiz on Blackboard. You may take these quizzes as many times as you like, but you must have one score per week. Also, on occasion, there will be an in-class exercise designed to get you to take part in your own education. These will also be a part of your participation grade as well. I will not allow you to make up these exercises

Late work will **NOT** be accepted in lecture or in lab. However, on occasion, circumstances arise and you may need to be absent from a class or lab session. I am more likely to be lenient if you give me some advance notice. This means e-mailing me (or your lab instructor) with the details of your absence

BEFORE lab or class. In extenuating circumstances, you may be able to attend another lab. Do **NOT** wait until after the exam or assignment as I will not excuse you.

LABORATORY

You should all be enrolled in a laboratory section. The syllabus for the laboratory portion of this course will be handed out during your lab session next week. You must have a brand new laboratory manual when you arrive at your lab. Used lab manuals are not acceptable.

Weekday	**Time**	**Instructor**
M	3:00-5:10	Jennifer Wenner (wenner@uwosh.edu)
T	8:00-10:10	Jennifer Wenner
T	3:00-5:10	Jennifer Wenner
W	8:00-10:10	Jennifer Wenner
W	3:00-5:10	Jennifer Wenner
Th	8:00-10:10	Mary Jo Pankratz (maryjo@martenson-eisele.com)
F	8:00-10:10	Mary Jo Pankratz

REVIEW SESSIONS

A review session will be scheduled before each exam. You are expected to arrive at the review session prepared to ask questions about the material covered in that section of the class.

Exam 1 review: Wednesday, February 25, at 6 PM in Halsey 109
Exam 2 review: Thursday, March 25 at 6 PM in Halsey 109
Exam 3 review: Thursday, April 15 at 6 PM in Halsey 109
Exam 4 review: Wednesday, May 13, IN CLASS in Halsey 109

FIELD TRIPS

An optional field trip will take place on Saturday or Sunday during the month of April. This will be discussed in further detail during a future lab session.

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 2001-2002 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.

LECTURE SCHEDULE

Wk	Date	Topic	Chapter
1	M Feb 2	Introduction: What is Geology? and the use of the Scientific Method	Prelude
	W Feb 4	The birth of the Earth and Earth Structure	2
	F Feb 6	The Rise of The Theory of Plate Tectonics	3
2	M Feb 9	Plate Tectonics	4
	W Feb 11	Plate Tectonics	4
	F Feb 13	Minerals: Atoms and chemistry	5
3	M Feb 16	Minerals: Their properties	5
	W Feb 18	Rock types and melting rocks	*Int. A*, 6
	F Feb 20	Magma and igneous rocks	6
4	M Feb 23	Igneous rocks and plate tectonics	6
	W Feb 25	A dynamic planet: Volcanoes	9
	F Feb 27	**EXAM 1**	
5	M Mar 1	Weathering: the formation of sediments	7
	W Mar 3	Sedimentary rocks and their environments	7
	F Mar 5	Metamorphic rocks	8
6	M Mar 8	Environments of metamorphism	8
	W Mar 10	Geologic time: Relative time and fossils	12
	F Mar 12	Geologic time: Absolute time and the age of the Earth	12
7	M Mar 15	***NO CLASS (SPRING BREAK)***	
	W Mar 17	***NO CLASS (SPRING BREAK)***	
	F Mar 19	***NO CLASS (SPRING BREAK)***	
8	M Mar 22	A dynamic planet: Faults and Earthquakes	10
	W Mar 24	A dynamic planet: Seismology and Earthquakes	10
	F Mar 26	A dynamic planet: Rock Deformation – folds and faults	11
9	M Mar 29	**EXAM 2**	
	W Mar 31	A dynamic planet: Mountain Building	11
	F Apr 2	The Hydrologic Cycle and Surface Water	*Int. E*
10	M Apr 5	Gravity and mass wasting	16
	W Apr 7	Landslides and other mass movements and the human element	16
	F Apr 9	The geology of running water	17
11	M Apr 12	Streams and their work	17
	W Apr 14	Video: Flood! (NOVA – 1993)	--
	F Apr 16	Groundwater – How It Works	19
12	M Apr 19	**EXAM 3**	
	W Apr 21	Groundwater: Hot springs, geysers, caves and karst	19
	F Apr 23	Groundwater usage problems	19
13	M Apr 26	Atmosphere and climate	20
	W Apr 28	Deserts	21
	F Apr 30	Deserts	21
14	M May 3	Glaciers: Movement and landforms	22
	W May 5	Glaciers: Ice ages	22
	F May 7	Global change	23
15	M May 10	Global change	23
	W May 12	Class evaluations and review	
	F May 14	**EXAM 4**	