

COURSE NUMBER: GEL/ESC 1300C **INSTRUCTOR:** John Stimac
CLASS HOURS: MW 4 - 4:50 PM **OFFICE LOCATION:** Science 139
LAB HOURS: Sec. 8: Tuesday 1600 - 1740;
Sec. 9: Thursday 1400-1540; Sec. 10: Thursday 1600 - 1740
OFFICE HOURS: MW 5 - 6 PM, R 8 - 10 AM; often after class, and by appt.
(581-7016)
TEXT: Physical Geology, 3rd ed., Monroe and Wicander

OBJECTIVES:

During this course, I hope that you'll gain an appreciation of science and the world around us - specifically how geology can, and does, relate to your life and the community. Everyone should be able to discuss, and give examples of, geology's significance to our everyday life and why it's important. There are a number of geologically important issues that will affect the way you live the rest of your life, such as natural hazards, global warming, and life on other planets: I want you to be able to critically assess those issues, so you don't have to depend on Rush Limbaugh and Al Gore to do your thinking for you. You will also be able to identify the common rock-forming minerals and be able to identify rocks that are found locally and discuss their significance. Concepts covered will include geologic time, the Earth's structure and origin, common rocks and minerals, and plate tectonics. Finally, a number of you will use geology in your careers, and I want you to be prepared for that.

GRADING:

Grading will be based on merit; that is, you will be graded primarily against your fellow students. A tentative breakdown is as follows:

Questions of the Day	3 pts. each	66 pts.
Labs	10 pts. each	100 pts.
Quizzes	50 pts. each	200 pts.
Mid-term Examination	150 pts.	150 pts.
Report	50 pts.	50 pts.
Lab Final	100 pts.	100 pts.
Final Examination	200 pts.	<u>200 pts.</u>
Total points available:		866 pts.

Questions of the Day: 3 pts. each. The Questions of the Day will be handed out at the beginning of each class and are due at the end of class. The question will concern some aspect of that day's lecture. Total value: 66 pts.

Quizzes: 50 pts. each. Quizzes will primarily cover material taught since the previous quiz or examination, but may also include earlier material. Format will be short answer, label the diagram, and completion. Quizzes will last 30 minutes. Total value: 200 pts.

Labs: 10 pts. each. Labs will cover the rock-forming minerals, the three major rock types, structural geology and physics of the earth's interior. Labs will be approached in a hands-on type of atmosphere -- the same manner in which the Lab Final will be given. There will be ten (10) labs.

Mid-term Examination: 150 pts. The mid-term examination will have the same format as the quizzes and will cover everything up to, and including, metamorphic rocks and processes. The mid-term examination will last one hour. Total value: 150 pts.

<p><u>Students with Disabilities</u> (Whether learning, physical, hard of hearing, psychiatric, or sensory) Eastern Illinois University promotes equal educational opportunities for students with disabilities. If you have a disability and may need any assistance, please notify your instructor and make an appointment immediately with the Office of Disability Services (Buzzard House, or call 581-6583)</p>
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Report: 50 pts. There will be one report due from each student. Topics can be anything covered in class or agreed upon with the instructor. Topics must be approved no later than October 13. Total value: 50 pts.

Grading of the reports, from the field trip or otherwise.

Content:

grade	criteria	approximate grade
5	outstanding explanation with superior supporting information; unusual insights and flashes of brilliance; creative and original analyses and thoughts; goes well beyond minimum required for assignment.	98
4	good solid job on explanation with excellent support from examples, data figures, etc., excellent reasoning, or excellent explanations; goes beyond minimum required for assignment.	88
3	good solid job; does what the assignment asks; decent reasoning or explanations; decent support by data, examples, figures, etc.	78
2	decent explanation but too general or some inaccuracies or flaws in reasoning or coverage is accurate but cursory and does not meet the minimum required for a complete answer.	68
1	doesn't effectively address assignment; fails to support assertions with data or examples; unclear explanations; inadequate understanding; majors flaws in reasoning or explanations.	58
0	answer missing or does not answer the question	0

Writing:

grade	criteria	approximate grade
5	meets criteria for 4, but also has a sense of style, going beyond grammatical correctness to real readability.	100
4	excellent paper/paragraph organization, interesting sentences, good grammar, very few spelling errors, does not read like a first draft.	90
3	decent organization; serviceable prose; reads like a first draft; a paper with excellent writing will still earn a 3 if it contain many spelling errors and is clearly not proofread.	80
2	disorganized; awkward sentence structure; poor grammar; poor spelling.	70
1	similar problems to 2, but worse.	60

Lab Final: 100 pts. There will be a practical lab final. The final will test the student's ability to correctly identify hand specimens and solve basic geologic exercises using topographic and geologic maps. The lab final will last one hour. Total value: 100 pts.

Final Examination 200 pts. The final examination will have the same format as the mid-term examination and will cover the entire course. This may include ideas presented in lab. The final exam will last two hours. Total value: 200 pts.

MAKEUPS or LATE ASSIGNMENTS:

No makeups will be allowed for missed questions of the day or quizzes or labs; examination makeups will only be allowed for unusual circumstances that are discussed with the instructor, preferably ahead of time.

ATTENDANCE:

Attendance is up to the student; however, roll will be taken during the first two weeks of class.

CAUTION: It is unlikely that you will be successful in this class unless you attend regularly.

CLASS SCHEDULE

Week	Dates	Topics	Assignment
1	August 23, 25	Introduction, Major features of the Earth; Earth's origin and structure	Intro., Chapt. 1 Chapt. 12
2	August 30, September 1	Minerals Minerals (continued) Lab: Introduction to the rock-forming minerals	Chapt. 2 Lab 1
3	September 8	Quiz #1 (formation and minerals) Lab: Introduction to igneous rocks	Chapt. 3
4	September 13, 15	Igneous rocks, volcanism Lab: igneous rocks	Chapt. 4 Lab 2
5	September 20, 22	Sedimentary Rocks and Processes Lab: Sedimentary rocks	Chapt. 6 Lab 3
6	September 27, 29 September 29	Geologic Time Scale Quiz #2 (igneous rocks and volcanoes) Lab: Geologic Time	Chapt. 8 Lab 13
7	October 4, 6	Metamorphic Rocks and Processes Lab: Metamorphic Rocks	Chapt. 7 Lab 4
8	October 11 October 13 October 13	Review and catch-up; Introduction to weathering Mid-term Examination (comprehensive) Last day to approve report topics Lab: Introduction to weathering (lecture)	Chapt. 5
9	October 18, 21	Earthquakes and the interior of the Earth Lab: Earthquakes	Chapt. 9, 10 Lab 5
10	October 25, 27	Topographic maps and cross-sections Lab: topographic maps and cross-sections	Appendix D Lab 6
11	November 1, 3 November 3	Rock Deformation Quiz #3 (earthquakes and topographic maps) Lab: Structural geology	Chapt. 13 Lab 7
12	November 8, 10	Mass Wasting Lab: mass wasting	Chapt. 14 Lab 8
13	November 15, 17 November 17	Running water, groundwater Quiz #4 (mass wasting and running water) Lab: aquifers, lakes and streams	Chapt. 15, 16 Lab 9
	November 23, 25	No classes - Thanksgiving recess	
14	November 29 November 29 December 1	Desert processes All reports are due (NO EXCEPTIONS) Deserts (continued), catch-up Lab: Deserts	Chapt. 18 Lab 10
	December 6 December 8	REVIEW FOR LAB FINAL REVIEW FOR FINAL EXAM LAB FINALS TO BE HELD IN LAB THIS WEEK	
	December 13	FINAL EXAM (5:15 - 7:15 PM)	