

Course Syllabus

Class Meets: MWF, 10:00-10:50pm, Science Building 176 (S176)

Text: Essentials of Geology, Lutgens, Tabuck & Tasa, 2014, 12th edition
ISBN-10: 0321947738 / ISBN-13: 978-0321947734

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My MUOnline: Blackboard Learn, version 9.1, October 2014 Release.
Office Hours:

- MWF: 11:00-11:30am
- M, 2:00-4:00pm
- T: 12:30-2:00pm
- W: 2:00-3:00pm
- Other times: by chance or appointment
- Not a good time: immediately before class

Course Description

- General Geology: 3 credit hours, 150 minutes, per week.
- A beginning level geology course which surveys elements of earth materials, processes, structures, and history, with an emphasis on geohazards affecting human societies.
- The course is designed primarily for the non-science major.
- Co-requisite (depending on major): 210L (Earth Materials Lab).
- The GLY 110/210L combination fulfills a Core II science requirement (do not have to be taken concurrently)

Major Course Learning Objectives

- Develop an understanding of the various types of geologic processes and the earth materials they produce.
- Develop an awareness of the extent to which our modern industrial society relies on geologic resources to maintain current standards of living.
- Acquire an appreciation for the dual role of geologists in our society; this involves the maintenance of the resource base on which society depends, and the monitoring and limitation of the impact of resource extraction and consumption on the environment.
- Become aware of geologic processes and materials that constitute geohazards and threaten human life and property.

Relationship of Course to Departmental Goals

As part of its mission as a liberal arts institution, Marshall University has an obligation to provide students with coursework and degree programs that cover natural sciences. As such, this course satisfies the requirement for a 3-hour class in the natural sciences. The importance of the natural sciences to students pursuing degrees in both scientific and non-scientific disciplines can be appreciated by recognizing that geology is in many ways a cornerstone of our society. Our way of life depends on geologic resources, and our ability to sustain mankind depends on a thorough understanding of how our activities impact the environment around us. The water, soil, air upon which we depend is primarily the product of ongoing geologic processes.

My Teaching Philosophy

- A good instructor doesn't so much deliver course content to students as provide the best opportunity for them to learn it themselves. For the student this means reading and studying material outside of class, listening and taking notes during lectures, and participating faithfully in the interactive exercises used in class such as discussion, quizzes etc. Following this philosophy, I consider myself a *facilitator* who will record exam and course grades based on your attainment of the course objectives, not a professor who simply "gives" grades to students.
- In this course you will be challenged to see the relevance of geology to your life. You may be surprised to find how much you depend on geologic processes and materials and, conversely, how they can threaten your property, health and even your life.
- My prediction: If you are not looking forward to this course, I am confident that by the end of the semester you will at least admit that it was more interesting than what you had anticipated, and may even say it was enjoyable and stimulating. A few of you may even decide to major in geology based on your experience in this course!

Assessment of Learning and Incentives

- **Exams.** Three equally-weighted, in-class exams will be given, the last one during finals week. Seventy percent (70%) of your grade will be based on these three exams (approximately 23% each). However, if your attendance is good throughout the semester (three or less unexcused absences), the lowest of the exam scores will only count for half (approximately 12%) of your grade and the two higher exams will count for approximately 29% each. **See attendance policy below.**
- **Quizzes.** Thirty percent (30%) of your grade will be based on quizzes. For quizzes assigned as homework, the due date and time be announced at least two class periods in advance. Late work will not be accepted.

Grading Policy

The following standard scale will be the default scale used for mid-term and final letter grades. Note that numerical scores and not letter grades are assigned for all individual exams and quizzes.

<u>Final Average (%)</u>	<u>Grade</u>	<u>Final Average (%)</u>	<u>Grade</u>	<u>Final Average (%)</u>	<u>Grade</u>
90-100	A	80-89	B	70-79	C
60-69	D	0-59	F		

Grading Policy (cont.)

- ***Note that the some or all of the above grade boundaries may be adjusted downward based on overall class performance. If such as an adjustment is made, it will benefit students “on the bubble.” In no case will the boundaries be adjusted upward.*** Also to benefit students, extra credit points will be added to students’ point totals after grade boundaries are drawn. In this way extra credit is used to reward students who earn extra points but not to punish those students who don’t.

Attendance Policy

- A sign-in list will be circulated each class period to document attendance. Signing the attendance list is the responsibility of each student. Arriving late or leaving lecture early may reduce or void credit for attendance for that day.
- Absences may be excused for serious medical or legal reasons, military obligation, or university activities excused by the academic deans. **Notice of an excused absence must be received by the instructor through the office of Student Affairs** (see pages 85-86 of 2015-2016 MU Undergraduate Catalog). The Interim Dean of Student Affairs is Carla Lapelle, located on the second floor of the Memorial Student Center (2W38), 304-696-6423 or lapelle@marshall.edu.
- ***In the case of an excused absence, any material missed can be completed, without penalty, by a later date assigned by the instructor. Failure by the student to complete the material by the assigned date will result in a zero for the assignment in question. The instructor may instead opt to assign a “no-grade,” without penalty to the student, for missed material as a result of the absence.***
- There will be no makeup exams without an official excused absence from the Dean of Students.

Extra Credit

- To allow motivated students a chance to improve their course grade, multiple opportunities will be available to earn additional points outside of normal class time. ***Extra credit will be awarded only for the organized field trips or other activities approved by the instructor.*** Field trips visit stops of geologic interest in the tri-state area and typically occupy approximately 2½ hours. Trips will be announced as far in advance as possible, usually 1-2 weeks ahead. In past semesters field trips have been scheduled for weekday afternoons. Other extra credit activities typically consist of on-line videos that students can view outside of class followed by an in-class quiz. Guest lectures outside of regular class time may also be offered as extra credit activities.
- Field trips and videos or guest lectures will generally be worth a maximum of 10 and 5 extra-credit points, respectively. The actual points earned for each activity will be based on an open-book quiz or other means of assessment. ***Students may earn up to 20 extra-credit points from these activities or 25 points if they attend at least one field trip.*** Each extra-credit point is worth ½ point added to the student's highest exam. A student earning 20 extra-credit points will raise their total percentage points toward the final grade by approximately 2 to 3% depending on class attendance (see example below).
- In order to accommodate the varying schedules of approximately 200+ students in multiple introductory geology sections each semester, multiple field trips will be scheduled so that students who may not be able to attend one activity can attend a different activity. Given the number of extra credit opportunities available, all students who want to earn the maximum number of extra credit points should be able to do so.
- In addition to the above, a total of up to 15 extra-credit points (1.8 to 2.2% towards final grade depending on class attendance) will be awarded for correct answers on the entrance exam, to be given during the first or second class meeting, and an exit exam, to be given on the last class meeting. Extra credit for the exit exam will be based on improvement relative to the entrance exam.
- Example calculation of extra credit and application to final grade: Hal Herd earned points for three extra-credit activities. His scores for one field trip and two videos (7/10, 5/5, 4/5), have earned him 16 extra-credit points. Each extra-credit point is worth ½ exam point added to the student's highest exam. Since Hal's class attendance is good (see attendance policy), his highest exam score is worth 29% of his total grade. In Hal's case, he has earned 76.0% of the total points from exams and quizzes, which guarantee him a grade for the course of no worse than "C" (see "Grading Policy"). We now take Hal's 16 activity-based extra credit points and, in effect, add ½ of them to the higher of his exams ($8 \times 0.29 = 2.3$), which give Hal an additional 2.3%, or 78.3% of the total. Finally, we add the results from Hal's entrance and exit exams, good for 12 extra credit points. Again, we add ½ to his highest exam ($6 \times 0.29 = 1.8$) and add the additional total points to Hal's total ($78.3 + 1.8 = 80.1\%$). Hal's final percentage now guarantees him a grade for the course of no worse than "B." Way to go, Hal, and thanks for playing ! Note that even with the same 28 extra credit points but without good attendance, Hal's overall average would have been 79.3% because his higher exam score would not have been weighted ($14 \times 0.23 = 3.3$, instead of $14 \times 0.29 = 4.1$). In this case he would receive a "C" for the class. ***One of the lessons here is that extra credit points are worth more when coupled with good attendance.***

Electronic Devices

Be courteous to your fellow students: do not let your phones be disruptive to the class. With the exception of basic-function calculators, use of any electronic devices during an exam will be considered evidence of cheating.

General Statement on University Policies

By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on “Marshall University Policies.”

Or, you can access the policies directly by going to www.marshall.edu/academic-affairs/policies/.
Academic Dishonesty/Excused Absence Policy for Undergraduates/Computing Services Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic Forgiveness/Academic Probation and Suspension/Academic Rights and Responsibilities of Students/Affirmative Action/Sexual Harassment

GLY 110-101 – Fall 2015 -- Course Schedule

<u>Week</u>	<u>Dates</u>	<u>Topic</u>	<u>Reading</u>
1	Aug 24/26/28	Introduction / Major Themes	Syllabus Chapter 1: 2-31
2	Aug 31/Sept 2/4	Plate Tectonics	Chapter 2: 32-65
3	Sept 9/11	Minerals	Chapter 3: 66-93
4	Sept 14/16/18	Igneous Rocks	Chapter 4: 94-110
5	Sept 21 Sept 23/25	Exam 1 Igneous Rocks (cont.)	Chapters 1-4 Chapter 4: 110-125
6	Sept 28/30/Oct 2	Volcanic Rocks & Hazards	Chapter 5: 126-159
7	Oct 5/7/9	Weathering & Soils	Chapter 6: 160-183
8	Oct 12/14/16	Sedimentary Rocks	Chapter 7: 184-215
9	Oct 19/21/23	Geologic Time	Chapter 18: 470-493
10	Oct 26 Oct 28/30*	Exam 2 Mass Wasting	Chapters 4-7, 18 Chapter 12: 318-337
*Oct 30 = last day to drop a course			

11	Nov 2/4/6	Earthquakes & Earth's Interior	Chapter 9: 238-267
12	Nov 9/11/13	Water on Earth	Chapter 13: 338-365
13	Nov 16/18/20	Groundwater	Chapter 14: 366-393
	Nov 23/25/27	Thanksgiving Break	Enjoy your break!
14	Nov 30/Dec 2/4	Climate	Chapter 20: 528-557
	Dec 7-11 M Dec 7, 10:15am	Final Exam Week Exam 3	Chapters 9, 12-14, 20

Useful Websites: **Information about Careers in Geology/Geoscience**

www.aqiweb.org www.usgs.gov www.geosociety.org