

Marshall University
GLY 200-202: Physical Geology – Spring 2015
Syllabus

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| Course Title/Number | GLY 200-202 |
| Semester/Year | Spring 2015 |
| Days/Time | TR, 11:00am-12:15pm |
| Location | COS 165 |
| Instructor | Bill Niemann |
| Office | S171 |
| Phone | 304-696-6721 |
| E-Mail | niemann@marshall.edu |
| Web | http://www.science.marshall.edu/niemann/ |
| Office Hours | MWF: 11:00-11:30am; TR: 10:30-11:00am; R: 12:30-1:00pm; M: 2:00-4:00pm |
| 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 |

Course Description

An elementary but comprehensive course in physical geology designed primarily for science and engineering majors.

The table below shows the following relationships: How each student learning outcome will be practiced and assessed in the course.

| Course student learning outcomes | How students will practice each outcome in this course | How student achievement of each outcome will be assessed in this course |
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| Students will learn and demonstrate an understanding of the earth's origin, composition, structures, tectonics and processes. | Practice quizzes and quizzes, group discussion | Exams & quizzes |

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| Students will learn and demonstrate an awareness of the extent to which our modern industrial society relies on geologic resources to maintain current standards of living. | Practice quizzes and quizzes, group discussion | Exams & quizzes |
| Students will 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. | Practice quizzes and quizzes, group discussion | Exams & quizzes |

Required Texts, Additional Reading, and Other Materials

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| <p>1. <u>Physical Geology</u>, Plummer, Carlson & Hammersley, 14th edition ISBN-13: 978-0073369389 ISBN-10: 0073369381</p> <p>2. http://connect.mcgraw-hill.com/class/b_niemann_spring2015_th_1100-1215</p> |
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Course Requirements/Due Dates

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| Exams are currently scheduled for February 19 th , April 2 nd , and May 7 th . Quiz due dates will be announced in advance. |
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Grading Policy

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| <p>Exams = 80%, Quizzes = 20%.</p> <p><i>Students with <u>two or less</u> unexcused absences (see attendance policy below) will be rewarded by having their lowest exam score weighted as half that of the other two exams.</i> For these students the two highest exams will be worth 32% of the final grade, and the lowest exam worth 16% of the final grade ([2 x 32%] + [1 x 16%] = 80%). For students with more than two unexcused absences, each of the three exams will count as 26.7% of the final grade (3 x 26.7% = 80%).</p> |
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Attendance Policy

A daily record of attendance will be kept by circulating a sign-in list at the beginning of each class. ***It is the responsibility of each student to sign the list, and if late to sign the list or notify the instructor at the end of the lecture.*** Failure to do so may result in an official absence for that lecture. 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 the Dean of Student Affairs*** (see pages 83-84 of 2013-2014 MU Undergraduate Catalog). The current Dean of Students is Steve Hensley, located on the second floor of the Memorial Student Center (2W38), 304-696-6423 or hensley@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.

Note that extreme weather could result in closure of the university and cancellation of class (see page 67-68 of the 2013-2014 MU Undergraduate Catalog). In some cases, university offices could remain open but classes would be cancelled. If the weather looks bad, check your e-mail and listen for announcements on local radio and TV.

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, movies/videos, Learn Smart study modules, or other organized group activities approved by the instructor.** Field trips typically occupy approximately 3 hours each and videos are generally available through an on-line link. In past semesters field trips have been scheduled on weekday afternoons and Saturdays.

Field trips and movies/videos will generally be worth a maximum of 10 and 5 exam points, respectively. The actual points earned for each activity will be based on performance on an open-book quiz or other means of assessment after the activity. **Students may earn a maximum of 15 extra credit points from these activities, or 20 points if one of the activities is a field trip.** A student earning 15 extra credit points from field trips and movies/videos will raise their total percentage points toward the final grade by a maximum of 3.2% (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.

In addition, a total of up to 17 extra credit points (a maximum of 2.7% towards final grade) will be awarded for all correct answers on the exit exam, to be given during one of the final regular class meetings.

Each extra credit point is equal to $\frac{1}{2}$ of an exam point. All extra credit earned is added to the total of the two higher exam scores.

Example calculation of extra credit and application to final grade: Hal Herd completed two extra credit activities. His quiz scores for one field trip and one video (7/10 and 5/5), have earned him 12 extra credit points. We also add the results from Hal's entrance/exit exams, on which he scored an adjusted score of 16. Since Hal's class attendance is good (see attendance policy), he is allowed to weight the lowest of his exam scores as half of the other two. In Hal's case, he has scored 72, 85 and 92 on the three exams, so we add the extra credit $\frac{1}{2} * (12 + 16) = 14$ to the total of the two highest exam scores ($85 + 92 + 14 = 191$). Now we calculate Hal's exam average as $[(191 + 0.50 * 72) / 2.5] = 90.8\%$. The exams are 80% of the final grade and the quiz average is 20% of the final grade. Assuming Hal's quiz average is 88%, his final grade is calculated as $[(0.80 * 90.8) + (0.2 * 88)] = 90.2$ Hal earns "A" grade for the course. Way to go, Hal, and thanks for playing ! Note that without the extra credit, Hal's overall average would have been 85.8% and he would have earned a "B" for the class. With the extra credit but with poor attendance, Hal's overall average would have been 87.7% and he also would have earned a "B" for the class. **One of the lessons here is that extra credit points are worth more when coupled with good attendance.**

GLY 200-202 – Spring 2015 -- Course Schedule

| <u>Week</u> | <u>Dates</u> | <u>Topic</u> | <u>Reading</u> |
|--------------------|---------------------|------------------------------------|---|
| 1 | January 13/15 | Introduction / Major Themes | Syllabus Chapter 1 (all) |
| 2 | January 20/22 | Labor Day /Earth's Interior | Chapter 17 (begin) |
| 3 | January 27/29 | Earth's Interior / Plate Tectonics | Chapter 17 (finish) Chapter 19 (begin) |
| 4 | February 3/5 | Plate Tectonics | Chapter 19 (finish) |
| 5 | February 10/12 | Minerals | Chapter 2 (all) |
| 6 | February 17/19 | Review / EXAM 1 | Chapters 17, 19, 1-2 (review) |
| 7 | February 24/26 | Igneous Rocks | Chapter 3 (all) |
| 8 | March 3/5 | Volcanic Rocks | Chapter 4 (all) |
| 9 | March 10/12 | Weathering & Soils | Chapter 5 (all) |
| | March 17/19 | Spring Break | Have a Good Break! |

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| 10 | March 24/26* | Sedimentary Rocks | Chapter 6 (all) |
| 11 | March 31 /April 2 | Review/ EXAM 2 | Chapters 3-6 (review) |
| 12 | April 7/9 | Geologic Time | Chapter 8 (all) |
| 13 | April 14/16 | Earthquakes | Chapter 16 (all) |
| 14 | April 21/23 | Mass Wasting | Chapter 9 (all) |
| 15 | April 28/April 30 | Streams / Groundwater / Review | Chapter 10: To be announced Chapter 11: 285-302 |
| FINAL EXAMS WEEK | Thursday, May 7 10:15 am – 12:15 pm | EXAM 3 | Chapters 8-11, 16 (review) |

*March 27 is last day to drop an individual course.

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

www.agiweb.org www.usgs.gov www.geosociety.org