

GEOLOGY 101
INTRODUCTORY GEOLOGY I
FALL 2008

Tuesdays & Thursdays 9:00-10:15 am, Innovation Hall Room 103

instructor: Dr. Rick Diecchio, 103C Science & Tech I, 993-1208, rdiecchi@gmu.edu
 website: <http://mason.gmu.edu/~rdiecchi/courses.html>
 office hours: Tues & Thurs 10:30-11:30 am, or by appointment
 text: Lutgens, Tarbuck & Tasa, 2009, *Essentials of Geology*, 10th edition, Pearson Publ.
 lab manual: Kysar-Matietti & Verardo, 2008, *Physical Geology Workbook*, George Mason Univ.

<u>date</u>	<u>lecture topic</u>	<u>readings</u>
26 Aug	introduction	ch 1 (p. 1-23)
28 Aug	overview of earth	ch 1 (23-31), 11 (246-248), 12 (272-274)
2 Sep	matter & minerals	ch 2
4 Sep	igneous minerals & rocks	ch 3
9 Sep	weathering & soils	ch 5, 12 (272-274)
11 Sep	sedimentary & metamorphic rocks	ch 6, 7
16 Sep	geologic time	ch 18
18 Sep	Quiz 1	
23 Sep	mass wasting	ch 8
25 Sep	wind & deserts	ch 12
30 Sep	rivers & streams	ch 9
2 Oct	rivers & streams	ch 9, fig 10.5, 12 (275-278)
7 Oct	groundwater	ch 10
9 Oct	glaciers	ch 11
14 Oct	fall break – no class	
16 Oct	ice ages & climate change	ch 11
21 Oct	shorelines & continental margins	ch 13
23 Oct	Quiz 2	
28 Oct	earthquakes & seismicity	ch 14 (318-337)
30 Oct	earth's interior	ch 14 (337-339)

4 Nov	crustal deformation	ch 17 (394-403)
6 Nov	plates & plate boundaries	ch 15 (342-361)
11 Nov	volcanism	ch 4
13 Nov	paleomagnetism, continental drift	ch 15 (362-369)
18 Nov	evolution of oceans	ch 16
20 Nov	Quiz 3	
25 Nov	mountain building	ch 17 (404-410)
27 Nov	Thanksgiving – no class	
2 Dec	evolution of continents	ch 19 (452-456)
4 Dec	past, present & future earth	ch 19
16 Dec (Tues)	FINAL EXAM 8:00 AM	

Course objectives:

1. to develop your ability to comprehend, analyze, and think
2. to give you a better understanding of science
3. to give you an understanding of the basic concepts of geology and the world around you.

Geology is the study of the solid, non-living earth. We will investigate the nature of earth materials and features, the processes by which these materials and features are formed, the techniques and thought processes by which we understand the earth and its processes, the implications for earth history, and the practical aspects of human interactions with the earth.

Please approach this course with an open mind. I expect that all students in this course will be introduced to facts and/or concepts that will be new and different. Be open to these new ideas, even if they seem strange or at odds with your current ideas or with your beliefs. It is difficult to understand science if you do not allow yourself the freedom of thought to do so.

GRADING:

quizzes (best 2 out of 3).....	50 points (25 points each)
final exam	40 points
lab	30 points

Grade scale: A:105-120 pts; B: 90-104 pts; C: 75-89 pts; D: 60-74 pts; F: 0-59 points

Lowest of the 3 quiz scores will be dropped. If you miss a quiz, that grade will be automatically dropped. The final exam is mandatory. Part of the final exam will cover the last part of the course. Most of the final exam will be comprehensive and will cover the entire course.

All quizzes and exams must be taken at the scheduled time. Students who arrive more than 15 minutes late will not be allowed to take the exam. Make-up quizzes and exams will not be given. Please bring a photo ID, scan-tron grading forms, #2 pencils, and a good eraser to each quiz and final exam. Make every effort NOT to erase answers on the scan-tron. If you do erase, do so cleanly and

show me the erasure marks when you hand in your exam. Do not make any stray marks on the scanner.

Quizzes and exams will contain mostly multiple choice questions, maybe a few true/false or matching questions, and maybe a few short answer questions. Exams will emphasize material presented in lecture, however you are also responsible for material contained in the readings. Exams will not just test your factual knowledge of the material. **You will be expected to apply your knowledge and understanding of the course material.** In this regard, it is of prime importance to understand geologic concepts, more so than facts. Some memorization will be necessary, but I consider this of secondary importance.

REGISTRATION

Please be sure you are registered for both lecture and lab. Lab is required and will meet every week, including the first week of class. Lab is an important part of the course, and I rely upon the lab exercises to supplement the lecture material. **Students who do not attend their first lab may be dropped from the entire course (lecture & lab).**

CAUTION: it is possible that your enrollment in this course (or any or all your courses) may be cancelled without your knowing for any of several reasons (example, for lack of payment). You may not receive notification. Therefore, it is important that you monitor your registration status during the first 2 weeks of the semester. It is most important that you make sure you are registered for your courses on 9 September. This is the day schedules are fixed, and it is the last day you can add into a class. **Anyone who is not registered for this class on 9 September, for whatever reason, will not be able to take this course.**

You may drop this course up until 26 September, however you will be charged for partial tuition after 9 September. You may elect to withdraw from this class up until 24 October, but it will remain on your record as WD. After 24 October you may petition the Deans Office to withdraw from all courses **for non-academic reasons.**

Important dates:

9 Sep	last day to register for a course; last day to drop a course with no tuition penalty
26 Sep	last day to drop a course
27 Sep-24 Oct	selective withdrawal period

HONOR CODE

This course operates under the rules of the honor code. Please be familiar with the code. Quizzes and exams are closed book and your answers must be your own. Lab work must be your own work unless team work is specifically allowed by the lab instructor. Your lab instructor will provide additional information about this.

CLASS CONDUCT

Please be considerate of others in the class by not talking during the lecture, by turning off your cell phones, and by sitting by the door if you come in late or have to leave early. Thanks

DISABILITIES

Reasonable accommodations will be made for students with disabilities, but the disability must be evaluated by the office of Disabilities Support Services in SUB 1.

TIPS FOR DOING WELL IN THIS COURSE

Before each class:

- Look at the syllabus & outline
- Read the chapters to be covered

During class

- Come to class
- Pay attention
- Try to listen, and don't try to write everything I say (most of it is in the book)
- Try to grasp concepts (these may NOT be specified in the book)
- Ask questions

After class

- Review notes
- Come see me if you don't understand something

Studying

- Try to understand concepts, don't just memorize facts
- Study in a group
- Come to review sessions
- Use the GEODe CD
- Use review questions at the end of the chapters
- Review last years exam questions
- Look for connections between topics
- Look for connections between lab and lecture material

Always

- Feel welcome to come see me about any questions or concerns
- Have an open mind