## 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


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

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