

# **GEO 1010** INTRODUCTION TO GEOLOGY SECTION 151 AND EDNET FALL 2012



Cars crushed by collapsed building, 1994 Northridge, CA earthquake

Kilauea eruption

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Course websites is on Canvas

Office hours: Monday, Wednesday, Friday 11:30 – 12:30 and by appointment

### **TENTATIVE CLASS SCHEDULE**

Week	Торіс	Reading Chapter	Recommended textbook problems	Etc.
Aug 27-Aug 31	Introduction Earth's spheres, plate tectonics	Prelude 1, 2	<u>Ch. 1</u> : 6, 11-17	
Sep 4-Sep 7	More Plate tectonics	2	<u>Ch. 2:</u> 3-5, 8, 9, 11-17, 19-22	Quiz 1; Labor Day Holiday 9/3
Sep 10-14	Minerals	3	<u>Ch. 3:</u> 1, 2, 5, 6, 9-11	Quiz 2
Sep 17-21	Igneous Rocks	Interlude A	<u>Ch. 4:</u> 1-9	Quiz 3
Sep 24-28	Igneous processes (volcanoes & plutonism)	5	<u>Ch. 5</u> : 1-10	Exam 1: Chapters 1-4 (tent.)
Oct 1-Oct 5	More Igneous processes (volcanoes & plutonism)	5		Quiz 4
Oct 8-10	Weathering and sedimentation	Interlude B 6	<u>Ch. 6:</u> 1-3, 5, 7-11	Fall Break 10/11- 12
Oct 15-19	Sedimentary rocks	6		Quiz 5
Oct 22-26	Metamorphism and metamorphic rocks	7 Interlude C	<u>Ch. 7:</u> 1-7, 10, 11	Exam 2: Ch. 5-7 (tent.)
Oct 29-Nov 2	Earthquakes	8	<u>Ch. 8:</u> 1-3, 5, 6, 8-12	Quiz 6
Nov 5-9	More Earthquakes	8, Interlude D		Quiz 7
Nov 12-16	Deformation of the crust and mountain building	9	<u>Ch. 9</u> : 2-11	Exam 3: Ch. 8-9 (tent.)
Nov 19-20	Geologic Time	Interlude E 10, 11	<u>Ch. 10</u> : 1-4, 6, 7 <u>Ch. 11</u> : 1, 5, 8, 9, 13	Thanksgiving break 11/21-23
Nov 26-Nov 30	Landslides and Mass Wasting, Surface water processes: rivers	13, 14, Interlude F	<u>Ch. 13:</u> 1-5, 8, 10; <u>Ch. 14</u> : 1, 5, 6, 10, 11, 15, 17	Quiz 8
Dec 3 - Dec 7	Ground water, Glaciers, Geologic Resources	16, 18, 12	<u>Ch. 16</u> : 1-6, 8, 10, 11; <u>Ch. 18</u> : 1-8, 10-12; <u>Ch. 12</u> : 1-5, 7-9, 12-15	Quiz 9
Dec 10-13	Final: Weds. Dec. 14 1:00 – 2:50 pm		Finals are in the classroom where lectures are held, at the official time Final is comprehensive.	Approx.: 50% Comprehensive 50% Ch. 10,11,12,13, 14,16,18

## REQUIRED TEXTBOOK

Marshak, S., 2009, Essentials of Geology 3<sup>rd</sup> Ed.: W.W. Norton & Company, New York, 536p. You may also use the 2<sup>nd</sup> edition; there is a list of chapters and questions for the 2<sup>nd</sup> edition on the class website

#### SCOPE AND FORMAT OF THE COURSE

Geology 1010 is meant to be fun, challenging and educational. During the semester we will study diverse aspects of geology such as plate tectonics, the formation of common rocks and minerals, volcanism, earthquakes, landslides and glaciers. Questions and discussions amongst the entire class during lectures are encouraged, and because questions and discussions take up class time, the schedule on the previous page may need to be modified.

Your grade for the class will be based primarily on your scores on quizzes and exams – there is no mandatory homework. However, during the semester, you will be expected to attend class, do readings and other homework assignments from the textbook, carefully answer study questions given out in class, and prepare for quizzes and exams. It is very unlikely that you will do well on the quizzes and exams without completing these tasks. The course grading scheme is designed to provide opportunities for you to succeed in the course, and in the event that you do poorly on an exam, the "Midterm Insurance" may help you avoid a complete catastrophe (be sure to read the section on Midterm Insurance below).

#### **COURSE WEBSITE**

There is a website for this course on Canvas. To access Canvas, login to UVlink at <a href="http://uvlink.uvu.edu">http://uvlink.uvu.edu</a> then follow the link to Canvas. Class handouts, most powerpoint files and your grades will be put on the website. We will also periodically post announcements to inform you about exams, handouts, grades, field trips, etc. Some of these announcements may be important and time-sensitive so I strongly urge you to have course announcements forwarded to an email account that you check regularly. Please be patient when looking for grade updates – it can take us some time to receive, grade and post the scores for your work from EdNet sites.

#### **GRADING**

Your grade will be based on 4 exams (3 midterms and a comprehensive final), your best 7 out of 9 quizzes, approximately 8 inclass assignments and any extra credit or bonus points your earn (described in following sections).

Quizzes: 7 @ 2 points each => 14% of grade from quizzes (lowest 1 or 2 quiz scores are dropped)

In class ex. 8 @ 1.5 point each => 12% of grade from in class exercises (approximate)

Midterms: 3 @ 18 points each => 54% of grade from midterms

Final:  $\underline{1 @ 21 \text{ points}} => \underline{21\% \text{ of grade}}$ 

**Total** =>101 percent (+ any extra credit and bonus points)

Your letter grade for the class and all assignments will be based on the following scale:

The highest score obtained by a student on any given exam and for the entire semester in the class counts as 100%, and your score is calculated as follows:

your percentage = (your score) / (highest score) x 100. For example, if the high score on a midterm is 47 points and you score is 38, your percentage would be 81.0%, good for a B-.

Quizzes are short (about 10 minutes), take place at the beginning of class and may be unannounced. It is your responsibility to attend class so as not to miss them, and to arrive on time to class - if you arrive late, you will not be allowed to take the quiz. 7 quizzes will count towards your grade; your lowest two quiz scores will be dropped if we complete 9 quizzes (only 1 quiz will be dropped if we complete only 8 quizzes).

*In class exercises* often will not be announced in advance and will entail activities such as working with maps and analyzing photographs of geologic features. Earning points on these exercises will be based on both participation and the quality of your work.

Midterm exams will be available at the testing center for UVU campus students. Distance site students will take the midterms during regular class time. The exact dates of the midterms will be announced in class. It is your responsibility to attend class and keep abreast of exam and quiz dates. All three midterm exams count towards your grade. The chapters each midterm will cover will be announced in class; the chapters listed on the front page of the syllabus are tentative only. Midterm scores below 70% may be supplemented by submitting insurance homework (see below).

The *Final exam* will be comprehensive, but with emphasis on the material that we'll cover after the 3rd midterm. No 'insurance' will be available for the final exam.

MAKE UPS: You are expected to treat college classes like a job and to take exams and quizzes at the regularly scheduled time. Plan your vacations and other activities so that they do not conflict with your classes. If something unforeseen and important prevents you from taking an exam at the regular time, contact Dr. Bunds (801.863.6306) or the Earth Science secretary (801.863.6295) before the end of the test period so we can work something out. No make-ups will be granted after the end of a test period. There will be no make-ups on quizzes because your two lowest quiz scores are dropped from your grade.

**HOMEWORK:** Your grade in this class will be based primarily on quizzes and exams. However, there is homework associated with the class; much of it you are not required to hand in for a grade (although you may want to; see 'Midterm Insurance' below), and some of it you are required to hand in. **Please be aware that it is unlikely you will pass this class without carefully completing and reviewing all of the homework** because the exams are drawn from the homework – both the optional and required homework. All in all, the homework falls into the following 3 categories.

- 1. Problems from the textbook (handing-in not required). On this syllabus, you are assigned some of the questions from the end of each chapter in your textbook. You are expected to complete all of these questions and to be prepared to answer similar or related questions on quizzes and exams. Note that the chapters covered by each midterm will be announced in class; the chapters listed on this syllabus are tentative and likely to change. Review questions and problems that are assigned on this syllabus comprise part of the Midterm Insurance (see below).
- 2. Questions on the study guides written by Dr. Bunds. The exams are drawn from these questions and they probably are your best study aid. They also are part of the Midterm Insurance described below. You will find that many of them tie together several concepts and require multi-sentence answers. Others ask you to draw sketches. Many of these questions are meant to be difficult. If you don't understand them, ask me during office hours, by email (distance students), or after class. The exams will ask you to reproduce some of the sketches and be able to explain the concepts that the sketches illustrate.

#### MIDTERM INSURANCE: TO ENSURE AT LEAST A C- ON EACH MIDTERM READ ON.

If you score below a C- on a midterm, you may be able to raise your midterm score by turning in the study guide and chapter questions that apply to a midterm before the end of the testing period. To get points equal to a C- (70%) on a midterm do the following. Correctly and completely answer in complete sentences all the questions on the study guide that apply to the midterm, and the recommended questions from the textbook (i.e., the first two types of suggested homework described above). You must turn your work in to me **before the end of the test period**. The answers must be neatly **handwritten**, in **complete sentences**, in **your own words** on a sheet of paper separate from the handout. You will be awarded a 70% score for the exam if the questions are complete and correct; work that is incorrect, incomplete, illegible, overly similar to other student's work, or otherwise substandard will earn (far) fewer points. Insurance is not available for the quizzes or final exam. **Do not expect to earn a C- in the course using only insurance** – you also must pass the quizzes and final. Preliminary study guides are available on the class website, and preliminary lists of recommended textbook questions for each chapter are listed on the class schedule above. **Photocopy all of you insurance homework.** 

**BONUS POINTS:** Unannounced bonus points will be awarded during the semester. Bonus points may be awarded simply for attendance, an in-class activity, an extra pop quiz, or watching an in-class movie. Bonus points can not be made up. If you miss class, you may miss out on bonus points.

EXTRA CREDIT: Up to three extra credit assignments may add one percentage point each to your total course score. Satisfactorily completing three extra credits normally raises your grade at least one increment (i.e., from a B+ to an A-). Assignments entail a one-page summary of a magazine article, web article or book that involves Earth Science, attending and submitting a summary on a UVU Earth Science seminar, or attending a field trip. The web links section on the class website is a good place to start looking for information sources. The summary must be handwritten and must include the article; substandard work will receive reduced points. All extra credit work is due (submitted to me, Distance Ed. or your facilitator) by Wednesday, December 5 – NO EXCEPTIONS.

**FIELD TRIPS:** There will be several one to two hour field trips that you are encouraged to attend. The field trips are fun, relaxed, educational, and you receive extra credit for attending. The dates and times of the trips will be announced in class. More information on the field trips can be found on the class website (http://research.uvu.edu/Bunds).

**GENERAL STUDENT RESPONSIBILITIES:** Your grade for this course will be determined primarily from your score on the exams and assignments. However, you must fulfill other responsibilities as well. Student responsibilities at UVU are described in the course catalog; below a few of particular significance to this course are outlined.

- 1. Attendance is not required but is strongly encouraged for this course. Quizzes and other activities may be unannounced and much of the exam material is drawn from lectures. Furthermore, it is your responsibility to be aware of announcements made in class.
- 2. Disruptive, dangerous or otherwise inappropriate behavior in the classroom, fieldtrips or during any activity related to the class may result in a failing grade for the class and appropriate penalties from the University.
- 3. Any form of cheating, including plagiarism, may result in an immediate E for the course or at the least the assignment and appropriate penalties from the University.

ATTENTION STUDENTS WITH DISABILITIES: Students who need accommodations because of a disability should contact the UVU Accessibility Services Department (ASD), located on the Orem Campus, in LC 312. To schedule an appointment, or speak with a counselor, call the ASD office at 801-863-8747, or for Deaf/Hard of Hearing individuals, use the video phone number, 886-760-1819.