# **GEOLOGY 1: THE EARTH**

#### Instructor: Adrienne Larocque

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Office Hours: Tuesday 6-6:30 pm and 9:30 to 10 pm, or by appointment (e-mail me to arrange it)

**Required Text:** *Essentials of Geology*, 5<sup>th</sup> edition, by Stephen Marshak (print or e-book)

# **Course Description:**

This course provides an introduction to rocks, minerals, landforms and the dynamic processes that shape the Earth. We will study major land-shaping forces like plate tectonics, volcanoes and earthquakes, in addition to features and surface processes such as deserts, shorelines and glaciers. **Course out line of record** can be found here: <u>https://portal.santarosa.edu/SRWeb/SR\_CourseOutlines.aspx?Semester=20173&CVID=25069</u>

# **Student Learning Outcomes:**

Upon completion of this course, the student will be able to:

- 1. Critically analyze scientific arguments using scientific methodologies and principles.
- 2. Describe and identify Earth materials and landforms.
- 3. Identify and explain processes that formed and continue to shape the landscape.

4. Make informed decisions in the context of the mutual influence that humans and the Earth have on one another.

# **Evaluation and grading:**

You will be evaluated by exams, homework assignments, and participation during the semester. There are 400 points possible in this class; points are distributed as follows:

- Midterm exams: 70 points each (x2 = 140 pts) (your lowest midterm exam score will be dropped)
- Cumulative final exam: 100 points
- Weekly assignments: worth 10 points each week (x15 weeks = 150 pts)
- Participation/Attendance: 10 points
- > Extra Credit: earn extra points as opportunities become available

Weekly Assignments: Each week, you will complete various assignments, objective quizzes, visual assignments, and written homework questions. Some of these assignments may be completed online. The total points for all assignments each week is 10 points. Plagiarism will not be tolerated. If you copy from another source, including the textbook and other students, you will not receive credit. *Assignments will be assigned on Tuesday evening (either in class or posted online), and will be due by 6:30 PM on the following Tuesday night.* It is YOUR responsibility to keep track of and complete the weekly assignments by the due dates. Late work is not accepted. You cannot successfully complete the course if you do not successfully complete the majority of the online assignments.

**Exams:** There will be three mid-term exams during the semester, worth 70 points each (50 objective and 20 written points). Your lowest mid-term exam score will be dropped when calculating your final grade for the class. There is one cumulative final exam, worth 100 points, that will emphasize material covered since the 3rd exam. Questions are designed to test your understanding of the subject matter and your ability to assimilate, incorporate and think about information. Exams will include multiple choice, fill-in-the-blank, and short answer format questions. Exam dates are written on the schedule.

# Important notes on exams:

You must provide your own #2 pencil and a 100 question Scantron form for all exams.

Leaving the room during an exam is NOT recommended. If you do so, you must turn your exam in to me, and consider yourself done.

You will not be allowed to start an exam once another student has finished and left the room.

Your lowest score from the first three exams will be dropped. The final exam score **will not** be dropped. If you miss an exam due to illness, emergency, tardiness, etc., this is the exam score you will drop. *Please do not ask for a make-up exam*. **Cheating is not tolerated**, and will result in no credit for the exam. If caught cheating, this may NOT be the exam that you drop. Please keep your exams and assignments once they have been handed back to you, at least until the end of the semester, for your records.

**Participation/Attendance:** Attendance will be recorded most class meetings. At the end of the semester, depending upon your attendance record and your participation in class, you may earn up to 10 points. There is no such thing as an excused absence. It is your responsibility to sign yourself in during each class meeting.

Extra Credit: It is highly recommended that you take advantage of these opportunities as they arise. They will addto your score, and will help you prepare for upcoming assignments and exams.Final letter grades will be based on the number of points earned, according to the following scale:A: 360-400 pts - 90+%B: 320-359 pts - 80-89%C: 260-319 pts - 65-79%

#### SUGGESTIONS FOR SUCCESS:

Devote the time necessary to succeed in this course and stay on top of the material. This course is not a cakewalk, but it is possible to do well if you: do the assigned reading; review and recopy lecture notes; take advantage of online and textbook resources; study for exams; complete all required assignments.

You may be expected to spend up to 6 hours per week outside of class to complete required reading, studying and assignments. Set high expectations and work hard to meet them. Do not hesitate to ask questions. Productive class participation is strongly encouraged. Get to know your instructor and your classmates.

Talking in class other than asking or answering questions is distracting to classmates and the instructor and interferes with your own and others' learning. You may be asked to leave the classroom for the remainder of the class period if you cause disruptions.

Abide by the Code of Student Conduct while in class and on campus, including rules on cheating and plagiarism. You are encouraged to read the code in its entirety if you have any questions. **Any violation of this code can result in your suspension from the classroom and/or receiving no credit for the assignment or exam.** The code (and other guidelines concerning student behavior on campus) can be found at the following web address:

# http://www.santarosa.edu/for\_students/rules-regulations/

Please leave cell phones outside the classroom or be sure to turn them off during class.

#### ADDITIONAL INFORMATION:

#### Safety/Emergency information:

Please note the location of the red Emergency Preparedness Handbook in the classroom. In an emergency situation, immediately contact **Campus Police at 527-1000 or dial 1000** from any campus phone. In the event of an emergency during class that requires evacuation from the building, please leave the class immediately, but calmly. If you are a student with a disability who may need assistance in an evacuation, please see me during my office hours as soon as possible so we can discuss an evacuation plan.

# **Disability Resources information:**

If you need disability-related accommodations for this class (such as a note taker, test-taking services, special furniture, use of service animal, etc.), please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to me as soon as possible. You may also speak to me privately during office hours about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD is located in Analy Village on the Santa Rosa campus, and Petaluma Village on the Petaluma Campus.

#### Section 7157 – Tuesday 6:30 to 9:30 pm

#### **Tentative Schedule:**

This schedule is subject to change, so if you skip classes and only show up for tests, you may get a surprise!

Week	Date	Торіс	Reading
1	1/17	Introduction to Geological Science Why we study the Earth	Prelude, Ch 1
2	1/24	Continental Drift Plate tectonics and Earth's Internal Structure	Ch 2, Int D
3	1/31	California Earthquakes Earthquake Location and Measurement	Ch 8
4	2/7	Earthquake Hazards	Ch 8
5	2/14	Earth Materials and Matter Exam #1: covering Ch 1, 2	Ch 3
6	2/21	Structure and Properties of Minerals	Ch 3
7	2/28	Rocks and the Rock Cycle Igneous Compositions and Textures	Ch 4, Int A,C
8	3/7	Igneous Processes and Plate Tectonics	Ch 4
9	3/14	Volcanic Landforms and Processes Volcanic Hazards and Prediction	Ch 4,5
10	3/28	Weathering and Erosion Exam #2: covering Ch 3,4,5	Int B
11	4/4	Sedimentary Compositions and Textures Sedimentary Environments	Ch 6
12	4/11	Metamorphism Deformation/Structural Geology	Ch 7, 9
13	4/18	Relative and Absolute Dating Fossils and Geologic Time	Ch 10, 11, Int E
14	4/25	Mineral and Energy Resources Exam #3: covering Ch 6, 7, 8, 9, 10, 11	Ch 12
15	5/2	Surface Processes	TBD
16	5/9	Surface Processes	TBD
17	5/16	Global Climate Change	Ch 19
18	5/23	Exam #4: Cumulative final exam, stressing last chapters studied and integrating all concepts	