GEOL 1L: Geology Lab, Section 4937 Spring 2019 Course Syllabus

Instructor Contact Information

Rebecca Perlroth Email: rperlroth@santarosa.edu Phone: (707) 527-4639 Office Hours: held in Lark 2021 Mon: 10:30-12, 2-3, and 6-6:30; Wed: 10:30-11:30, and 4:30-5; Hours available most days by appointment

I typically respond to email and voicemail messages within 24 hours (may be longer on weekends or holidays).

Course Description

This course is a supplementary offering alongside the lecture component, GEOL 1 (The Earth). The lab component offers a hands-on opportunity to study minerals and rocks, and to interpret geologic processes and landforms through analyzing maps and other data. Topics that will be covered include: identification of minerals and rocks, map reading skills, interpretation of plate tectonics and earthquakes, and synthesis of these subjects out in the field.

Student Learning Outcomes

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

- 1. Apply scientific techniques to solve geological questions.
- 2. Recognize, identify and describe Earth materials.
- 3. Interpret evidence of tectonic plate interaction.
- 4. Utilize maps and other data to interpret features on the Earth's surface.

Important Dates

Meeting Time	Wednesdays, 1:30 - 4:30 pm	
Meeting Location	Lark 2042	
Class Begins	January 16	
Day Class Ends	May 15	
Last Day to Add w\o instructor's approval	January 20	
Last Day to Drop with refund	January 27	
Last Day to Add with instructor's approval	February 3	
Last Day to Drop without a 'W' symbol	February 3	
Last Day to Opt for Pass/No Pass	February 24	
Last Day to Drop with a 'W' symbol	April 21	
Final Exam	May 22, 1:00 - 3:45 pm	

Textbook and Other Required Materials

<u>Laboratory Manual for Introductory Geology</u>, by Ludman and Marshak, 3rd edition. You may use the print or online version. You can locate and order textbooks online via the <u>SRJC Bookstore (Links to an external site.)</u>.

ISBN13: 978-0393937916 ISBN10: 0393937917

You are required to bring **the lab manual** to class for each class meeting **including the first** (must be actual print textbook OR photocopied OR printed pages from the lab manual - labs completed on binder paper will NOT be accepted). You will also need:

- 1. Pencil AND eraser for each class meeting (no pen allowed)
- Calculator (phones OK in lab time, but not acceptable for exams) Make sure it can take big numbers... Time and distances in geological calculations are huge, often in the billions!
- 3. Ruler (must have both centimeters and inches)

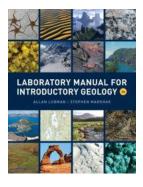
Expectations

- You must attend class each week with all the appropriate equipment (see above), take all exams and quizzes, and complete the in-class and (very occasional) homework assignments. There are no make-up opportunities, so being present is the only way to receive credit for completion of these activities.
- You are expected to know and be able to apply some simple arithmetic in this lab. This means addition, subtraction, multiplication, and division. If you do not feel comfortable with your arithmetic skills, there are resources available to you through the Tutorial Center (Doyle Library, First Floor, Room 4251) or feel free to ask me, and I can point you in the right direction.
- Everyone can succeed in this lab class. Plan to do the work, show up to each class meeting on time, and work hard. Seek help as needed.
- Dropping the course: If you decide to discontinue this course, it is your responsibility to officially drop it. A student may be dropped from any class when that student's absences exceed ten percent (10%) of the total hours of class time. It is strongly advised that if you need to miss more than one class meeting that you contact the instructor to avoid being dropped from the class.
- Attendance: Students who fail to attend the first class meeting may be dropped by the instructor. Please let the instructor know if you will not be able to attend class the first week.

Evaluation and Grading

You will be evaluated by exams, quizzes, and your participation in class. There will be 550 possible points in this lab. Points are distributed as follows:

- <u>Exams:</u> 75 pts each (x4 = 300 pts) There will be four exams during the semester (section exams: these are not cumulative; see schedule for details). Exams will test your knowledge and your ability to practically demonstrate your understanding of the material. Questions include multiple choice, fill-in-the-blank, calculations, and hands-on exercises similar to in-class lab activities. You will **not** need a Scantron form for the exams, but you will need a pencil, eraser, calculator (not a cell phone), and ruler. Due to the nature of lab exams, **there are no make-up exams**.
- <u>Quizzes:</u> 10 pts each (x11 = 110 pts) There will be a short quiz at the start of each lab period covering the assigned reading material for the week's lab exercise. Be sure to do the assigned reading **before** coming to class. Questions



may include multiple choice, fill-in-the-blank, and definition questions. The quiz will begin promptly at the start of the lab session and last 5-10 minutes. There are no opportunities to make-up quizzes, so please arrive to class on time – arriving late decreases the time you have to complete the quiz. Your lowest quiz score will be dropped.

Exercises and assignments: 10 pts each (x14 = 140 pts) You will be evaluated upon your attendance and participation during weekly in-class exercises. *If you are unsure what is due, refer to the tentative schedule on the last page, or please ask.* Answer keys will be posted in the classroom after lab is completed each week. It is your responsibility to check your work to make sure you understand the material, and to ask questions as needed.

Grades

Final letter grades will be based on the number of points earned, according to the following scale:

A 90% 495 points or more
B 80% 440 to 494 points
C 65% 358 to 439 points
D 55% 303 to 357 points

If taking the course Pass/No Pass you need to earn at least 65% of the total class points in order to pass.

You will be able to monitor your grades throughout the semester by visiting the course's Canvas page, accessible via your SRJC student portal.

Standards of Conduct

Students who register in SRJC classes are required to abide by the SRJC Student Conduct Standards. Violation of the Standards is basis for referral to the Vice President of Student Services or dismissal from class or from the College. See the <u>Student Rights and Responsibilities</u>.

Copying of tests or homework in whole or in part will be considered an act of academic dishonesty and result in a grade of 0 for that test or assignment. Students are encouraged to share information and ideas, but not their work. See these links on Plagiarism:

SRJC Writing Center Lessons on avoiding plagiarism Student Rights and Responsibilities

Special Needs

Every effort is made to conform to accessibility standards for all instructor-created materials. Students should contact their instructor as soon as possible if they find that they cannot access any course materials. Students with disabilities who believe they need accommodations in this class are encouraged to contact Disability Resources (527-4278). Every effort will be made to work with students with disabilities. Please contact your instructor as soon as possible to discuss appropriate accommodations.

Safety/Emergency information

Please note the location of the 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.

Tentative Schedule (bring this page with you each class period for your reference)

		Required reading in Laboratory	
Date	Topic covered in Lab	Manual	In-class and what's due
1/16	Physical properties of minerals	Ch 3	Lab assignment due
1/23	Mineral ID - Non-silicates	Ch 3	Quiz #1; do not hand in lab assignment
			samples 2-7, 9, 13, 14, 16-19, 24, 25, 28, 29, 34
1/30	Mineral ID - Silicates	Ch 3	Quiz #2; do not hand in lab assignment
			samples 1,8,10-12, 15, 20-23, 26, 27, 30
2/6	EXAM #1: Minerals		
2/13	Igneous Rocks	Ch 5	Quiz #3; lab assignment due (minus ID chart)
2/20	Sedimentary Rocks	Ch 6	Quiz #4; lab assignment due (minus ID chart)
2/27	Metamorphic Rocks	Ch 7	Quiz #5; lab assignment due (minus ID chart)
3/6	Rock Cycle and Review Activity	Ch 4-7	Do not hand in lab assignment
3/13	Review and EXAM #2: Rocks		
3/18- 3/22	NO CLASSES - SPRING BREAK		
3/27	Topographic Maps I	Ch 9 (pts A and B)	Quiz #6; lab assignment due
4/3	Topographic Maps II	Ch 9 (pts A and B)	Quiz #7; Handout and lab assignment due
4/10	Field Trip (date dependent upon weather)		Field trip report
4/17	Earthquakes	Ch 16	Quiz #8; lab assignment due
4/24	EXAM #3: Topographic Maps and Earthquakes		
5/1	Geologic Time and Dating Methods	Ch 8	Quiz #9; lab assignment due
5/8	Shoreline Landscapes	Ch 14	Quiz #10; lab assignment due
5/15	Plate Tectonics	Ch 2	Quiz #11; do not hand in lab assignment
5/22	EXAM #4: Geologic Time, Shorelines and Plate Tectonics, scheduled 1-3:45 pm		