

# GEOL 1L: Geology Lab, Section 0930

## Fall 2019 Course Syllabus

### Instructor Contact Information

Rebecca Perthroth

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Phone: (707) 527-4639

Office Hours: held in Lark 2021

Mon: 10:30-11:30; Tues: 10:30-11 & 2-3; Wed: 10:30-11:30; Thurs: 10:30-11; Add'l hours 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

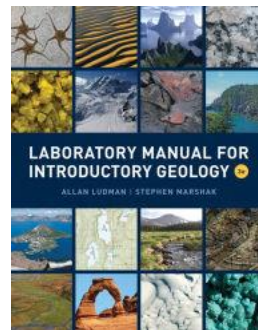
Meeting Time	Wednesdays, 1:30 - 4:30 pm
Meeting Location	Lark 2042
Class Begins	August 21
Last Day of Class	December 11
Last Day to Add w\o instructor's approval	August 25
Last Day to Drop with refund	September 1
Last Day to Add with instructor's approval	September 8
Last Day to Drop without a 'W' symbol	September 8
Last Day to Opt for Pass/No Pass	September 29
Last Day to Drop with a 'W' symbol	November 17
Final Exam	December 18, 1:00 - 3:45 pm

## Textbook and Other Required Materials

Laboratory Manual for Introductory Geology, by Ludman and Marshak, 3<sup>rd</sup> edition. You may use the print or online version. You can locate and order textbooks online via the SRJC bookstore, directly from the publisher, or rent or borrow/share a lab manual. **Each student must have the required chapter with them for class each week** (see schedule for appropriate chapter). You will be handing in pages from the lab manual each week, so let this guide your decision about how to procure the appropriate chapters.

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 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)
2. **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 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 will help you in any way I can, or point you to appropriate resources.
- 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 450 possible points in this lab. Points are distributed as follows:

- ❖ Exams: 60 pts each (x4 = 240 pts) There will be four exams during the semester (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.**

- ❖ Quizzes: 10 pts each (x10 = 100 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 for quiz make-ups, so please arrive to class on time – arriving late decreases the time you have to complete the quiz.
- ❖ Exercises and assignments: 10 pts each (x11 = 110 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 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+%

B= 80-89%

C= 65-79%

D= 55-64%

F= less than 55%

If taking the course Pass/No Pass you need to earn at least 65% of the total class points in order to pass. Once you switch to the Pass/No Pass grading scheme, you cannot switch back to grade.

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 [Student Rights and Responsibilities](#).

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)

Date	Topic covered in Lab	Required reading in Laboratory Manual	In-class and what's due
8/21	Intro to GEOL 1L; Scientific Method Lab	Ch 1 (1.1.1 & 1.1.2)	Lab assignment due; handout
8/28	Plate Tectonics	Ch 2	Quiz #1; lab assignment due
9/4	Mineral ID - Non-silicates	Ch 3	Quiz #2; do not hand in lab assignment samples 2-7, 9, 13, 14, 16-19, 24, 25, 28, 29, 34
9/11	Mineral ID - Silicates	Ch 3	Quiz #3; do not hand in lab assignment samples 1,8,10-12, 15, 20-23, 26, 27, 30
9/18	<b>EXAM #1: Scientific Method, Plate Tectonics and Minerals</b>		
9/25	Igneous Rocks	Ch 4 & 5	Quiz #4; lab assignment due (minus ID chart)
10/2	Sedimentary Rocks	Ch 6	Quiz #5; lab assignment due (minus ID chart)
10/9	Metamorphic Rocks	Ch 7	Quiz #6; lab assignment due (minus ID chart)
10/16	Rock and Mineral Review lab	Ch 4-7	do not hand in lab assignment
10/23	<b>Review and EXAM #2: Rocks</b>		
10/30	Field Trip (date dependent upon weather)		Field trip report
11/6	Earthquakes	Ch 16	Quiz #7; lab assignment due
11/13	Field Trip (date dependent upon weather)		Field trip report
11/20	Geologic Time and Dating Methods	Ch 8	Quiz #8; lab assignment due
11/27	<b>EXAM #3: Earthquakes and Geologic Time</b>		
12/4	Topographic Maps I	Ch 9 (pts A and B)	Quiz #9; lab assignment due
12/11	Topographic Maps II	Ch 9 (pts A and B)	Quiz #10; do not hand in lab assignment
12/18	<b>EXAM #4: Topographic maps, scheduled 1-3:45 pm</b>		