

GENERAL GEOLOGY LAB SYLLABUS

Lab Hours: 3

Message phone (MSE office): (619) 421-6459

Prerequisite/Corequisite: Geology 100 or equivalent

E-mail address: pfarquharson@swccd.edu

Unofficial class information website: <http://geolab.geology-guy.com/>

Blackboard: <http://swccd.blackboard.com/>

Required Textbook

Laboratory Manual in Physical Geology 8th Edition, edited by Richard M. Busch for the American Geological Institute and National Association of Geoscience Teachers. You are responsible for reading these materials before class, and you will be quizzed on the reading material at the start of each class period. All exercise questions must be completed in Blackboard, unless otherwise advised. Also, you will want to refer to your Geology 100 text (Murck *et al.*, Tarbuck & Lutgens, or equivalent) and various web resources which will be provided on the unofficial class website as the semester proceeds.

Required Supplies

Bring a pencil and a large eraser with you to every class meeting. Do **not** use pen. You will be submitting the bulk of your assignments via Blackboard, so you will need Internet access, either at home or work, or using the Southwestern College computers in the library.

Instructor Availability

I am a friendly, helpful, approachable person, who is available by appointment. However, I do not have an office on campus nor office hours. I want you to enjoy learning what I have made my life's work, so I am available to you by other means. E-mail is preferred, with backup method of the telephone.

Course Description

Designed to provide practical application of the scientific method as applied to the geological sciences. The course corresponds to S.D.S.U. Geology 101.

General Requirements

- Attendance is very important and required. Important material will be covered in each class session. As a result, an absence from even one class meeting will mean catching up on lots of information. Each student is expected to attend every class meeting and arrive punctually. In case of extreme emergency, the student should file a petition for a Leave of Absence in the Admissions Center. A student will be dropped when **unexcused** absences exceed **three** hours (1 class) or when **total absences** exceed **six** hours (2 classes). Excused absences will be granted for illness and family emergencies only. To qualify, notify the instructor's E-mail about the absence, giving the reason.
- **PLAN TO ARRIVE EARLY FOR CLASS!!** I understand that, occasionally, things run late. However, do not make a habit of arriving late or leaving early as it causes a disruption for me and for other students in the class. There will be a quiz on the reading assignment at the start of each class.
- Excessive **tardiness** (includes leaving class early) is not allowed. Upon the fourth tardy, the student may be dropped from the class.
- The last day to add a class is August 29th, and the last day to withdraw from class without receiving a "W" grade is September 11th. Last day to withdraw and receive a "W" is November 6th.
- Each student is expected to conduct herself / himself in a professional manner. Inappropriate conduct in the classroom includes talking, eating, drinking, wisecracking, sleeping, inappropriate disruptions, etc. Please respect the rights of others to enjoy a quiet and successful learning environment. If I feel that your behavior is disrupting the class, you will be asked to leave.
- Cellular telephones and other noise-makers: turn 'em off!
- Visitors allowed only with instructor approval.
- Tape or digital recordings are encouraged, if it helps you learn.

- Food and beverages are not allowed in the classroom. Plastic water bottles are allowed but clean up behind yourself.
- Southwestern College recommends that students with disabilities discuss academic accommodations with their professors during the first two weeks of class. This syllabus and course handouts are available in alternate media upon request.

Cheating

Cheating on exams or assignments, and plagiarism of material is a very serious academic offense. Plagiarism is defined as: "using others' ideas and words without clearly acknowledging the source of that information" (<http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml>). This applies to any submission of material in this or any other college class. Probably the best rule of thumb is: If you are not the originator of the words, ideas, or works, you may not use them without proper reference. Submitted work must reflect your own thoughts and work entirely. If there is any doubt, don't do it. I will be the judge of acceptability so you are welcome to check with me if you are not sure. If, in my judgment plagiarism has occurred, these acts will, at a minimum, result in a "zero" grade for that exam or exercise. "I didn't mean to" or "I didn't know it was plagiarism" (among others) are not excuses. Educate yourself and do your own work. You can learn more about how to avoid plagiarism at the website above.

Field Trips

Field trips will be held to observe local geology. The trips will require light walking, taking notes, sketching, and class discussion. You are responsible for having note-taking materials, and appropriate clothing for these field trips. The dates for these trips are shown in the schedule below. We will try to arrange car-pooling for these trips, especially the Ocean Beach trip.

In addition, the Southwestern College Earth Science Club, "Terra Incognita", will be conducting an overnight field trip to the Salton Sea. The dates of this field trip are (tentatively) November 6th through the 8th (Friday through Sunday).

In Class Work

There will be a short (5-point) quiz on the reading at the start of each lab period, which also will act as roll call. These will probably be the only exchanges of "dead tree" materials you will encounter in this course.

Exercises assigned during laboratory classes are to be performed during class and are due in Blackboard the following week at 11:59 PM. Late work will be marked down 10 percent per week and will not be accepted after the final exam period. Each assignment will be graded only once.

Exams

There will be no in-class exams, but each lab exercise will be completed in the form of an online quiz, to be completed in Blackboard. These will be based on the lab manual and supplementary web links, and due before the next class period.

Grades

Grades are calculated as follows: A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, F = < 59%.

Course grades are calculated on:

- In-Class Exercises 270 points
- In-Class Quizzes 45 "
- Field Trip Reports 90 "

Total possible: **405 points**

Schedule

Date		Exercise	Topic	Milestones
August	18		Introduction	"Quiz 0" – due 2 nd class period (10 points)
	25	1	Observing and Measuring Earth Materials and Processes	10 points
September	1	3	Mineral Properties, Uses and Identification	20 points
	8	4	Rock-forming Processes and the Rock Cycle	20 points
		5	Igneous Rocks and Volcanic Hazards	
	15	2	Plate Tectonics and the Origin of Magma	20 points
	22	6	Sedimentary Rocks, Processes and Resources	20 points
	29	7	Metamorphic Rocks, Processes and Resources	20 points
October	6		Field trip – O.B. Pier (meet in Ocean Beach)	50 points
	13	8	Dating of Rocks, Fossils, and Geologic Events	20 points
	20	9	Topographic Maps and Aerial Photographs	20 points
	27	10	Geologic Structures, Maps, and Block Diagrams	20 points
November	3	11	Stream Processes, and Flood Hazards	30 points
		12	Groundwater Processes, Resources, and Risks	
	10	14	Dryland Landforms, Hazards, and Risks	20 points
	17	15	Coastal Processes, Landforms, Hazards, and Risks	20 points
	24		Field Trip – Chula Vista Nature Center (West end of "E" Street, Chula Vista)	40 points
December	1	16	Earthquake Hazards and Human Risks	20 points
	8		Make-up and/or Review	
	15		10:30 AM – 12:30 PM, Room 461	Final exam period

Course Objectives

1. Student will identify and compare a selected number of mineral specimens and consider the origin of minerals.
2. Student will identify and compare a selected number of rock specimens and consider their origin.
3. Student will evaluate and analyze the use of topographic maps.
4. Student will evaluate and analyze the use of geologic maps.
5. Student will identify and analyze selected examples of structural geology.
6. Student will evaluate exercises on the Geologic Time Scale.
7. Student will identify and compare fossil specimens.
8. Student will prepare geological field reports based on observations from a selected number of study sites during field trips.