

Geology Laboratory Syllabus - DELANO CRN 71711

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Main Campus phone: 395-4391

INSTRUCTOR: Jack Pierce
OFFICE: MS-27
OFFICE HOURS: Posted on Website - www2.bakersfieldcollege.edu/jpierce
REQUIRED TEXTS: Physical Geology Manual - N. Bursztyn and various lab supplements
CLASS MEETINGS: Thursday 6:00-9:10 DST 102

COURSE DESCRIPTION (Catalog description)

GEOL B10L Introduction to Geology Laboratory (1 unit)

Exercises planned to accompany the lectures of GEOL B10. Identification of rocks and minerals, topographic and geologic map exercises demonstrating the work of water, wind, ice and gravity and effects of volcanism and earthquakes. Designed for students preparing to teach in the elementary grades and for all non-science majors. **Prerequisite:** GEOL B10 (may be taken concurrently). **Recommended:** Reading Level 5 or 6. **Hours:** 54 lab. Field trip required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE

LAB COURSE OBJECTIVES (Student Learning Outcomes - SLOs)

1. **Demonstrate a knowledge of and recognize the processes that explain natural phenomena**
 - a. Understand the materials that make up the earth; minerals, major rock types, their geologic environments and the rock cycle
 - b. Understand how earth history is deciphered using various types of geologic dating techniques.
 - c. Understand the mechanics of plate tectonic boundaries and associated geologic environments that produce various types of rocks
 - d. Understand the nature of earthquakes and fault types
2. **Apply methodologies of science when approaching a problem**
 - a. Understand and apply the various steps in the scientific method that lead to the "accuracy" of earth processes.
 - b. Understand the interpretation of topographic maps by recognizing land features delineated with contour lines
 - c. Understand the interpretation of geologic maps by recognizing geologic structures based on age dating and stratigraphic principles
3. **Apply logical quantitative and qualitative reasoning in solving problems or analyzing argument**
 - a. Understand man's place in earth's history and how man has impacted the earth's spheres.

ATTENDANCE POLICY

In order to perform well on exams and quizzes, students find that regular class attendance is necessary. Instructional material and discussions will be presented in class that cannot be found in the text. If you are absent, you must consult with the instructor the **FIRST DAY UPON YOUR RETURN** to class if you wish the absence to be excused. On the day of an absence, please call the instructor at 395-4391 or email the instructor (jpierce@bakersfieldcollege.edu). Getting an education is like having a job. Treat this class like a position of employment- call and be a responsible student.

State education codes for community colleges (unlike 4-year colleges) require instructors to maintain attendance records. If you are absent the equivalent of two weeks (4 or more lecture hours, or 2 or more labs, or a combination thereof), you may be dropped from the course. If this occurs after completion of 75% of the course, you will receive a failing grade.

WITHDRAWAL FROM THE COURSE

If you decide to discontinue the course for ANY reason, please make an official withdrawal. If you fail to officially withdraw from a class which you are no longer attending, you may receive an "F" on your transcript. The Bakersfield College catalog states:

"Students are responsible for officially withdrawing from any class or classes in which the student no longer wishes to be enrolled. Non-attendance does not release the student from this responsibility."

STUDENTS WITH DISABILITIES

"Students with disabilities who believe they may need accommodations in this class are encouraged to contact Disabled Student Programs & Services (661-720-2001), Delano Campus, Room 1001, as soon as possible to better ensure such accommodations are implemented in a timely fashion."

STUDENT TUTORING

Tutoring Center

Every student is entitled to tutoring services located at the Learning Center (395-4430). It is your responsibility to maintain a record of your progress and success in the course. If you are falling below your expectations, it is advisable to make an appointment with the instructor or seek assistance at the Learning Center.

ACADEMIC DISHONESTY

Academic dishonesty (cheating, plagiarism, copying assignments/tests) will not be tolerated and guilty parties will receive an "F" on any assignments and will be subjected to the disciplinary policies outlined in the Bakersfield College handbook.

LAB EVALUATION

Lab Assignments

You will be participating in weekly labs that support the contents discussed in lecture topics. For each lab session, there will be a lab exercise from either the BC-Lab book or various labs from other sources. In some lab activities, students may work in pairs. The instructor will let the class know if the lab activity is "group" or "on your own." The instructor will collect and review lab assignments from weeks 8-15 starting with topographic maps. Although I will not collect all lab exercises, the student should make every effort to complete each lab. Lab tests and quizzes will be based on information learned from each lab exercise.

Lab Exams and Quizzes

There will be 3 lab quizzes given at the beginning or end of each lab. Lab quizzes are scheduled below. Quizzes will be a combination of multiple choice, matching, short answer or fill-in-the-blank. Some quizzes involve "hands-on" lab material. All quizzes will be closed book/closed notes with the exception of quiz 1. Students will be allowed to use notes and classification charts for quiz 1.

There will be 2 major lab exams. Exam 1 will cover the identification of rocks and minerals. Students may use their lab notes and identification charts for Exam 1. Exam 2 (final exam) will cover weeks 8-15. You will be allowed to have one 8x11 sheet of paper that contains any of your handwritten or computer generated (by you) information that you think will help you complete the exam (all 6 sides are available for use). See quiz schedule below.

GRADING

Your final grade is based on the following percentage breakdown:

Lab evaluation

Exams	45%
Quizzes	25%
Lab assignments	20%
Class participation	10%
Total	100%

Geology Lab Schedule

Week 1	Aug 27 - Attendance, Class Overview - syllabus
Week 2	Sep 3 - Mineral Identification
Week 3	Sep 10 - Mineral Identification
Week 4	Sep 17 - Igneous Rock Identification - Quiz 1 (10 minerals - use notes/charts)
Week 5	Sep 24 - Sedimentary Rock Identification
Week 6	Oct 1 - Metamorphic Rock Identification
Week 7	Oct 8 - Mineral and Rock Identification review lab
Week 8	Oct 15 - Mineral/Ig, Sed, Met identification EXAM (use notes/classification charts)
Week 9	Oct 22 - Topographic Maps
Week 10	Oct 29 - Topographic Maps
Week 11	Nov 5 - Relative Dating principles
Week 12	Nov 12 - Plate Tectonics/EQ/Faults and folds
Week 13	Nov 19 - Plate Tectonics/EQ/Faults and folds - Quiz 2 (Weeks 9-12)
Week 14	Nov 26 - NO CLASS - THANKSGIVING
Week 15	Dec 3 - Structural Geology/Geologic Maps Quiz 3 (Weeks 13-15)
Week 16	Dec 10 - FINAL EXAM -covers weeks 10-15 Thursday, December 10th 12:00 - 1:50

**** Instructor reserves the right to change any section or part of the syllabus.**

SYLLABUS ACKNOWLEDGMENT

Please print the following information and return to the instructor at the beginning of class on Week 2.

Date: _____

Name: _____

Phone # _____

Email address: _____ (Print Clearly !!!!)

1. I have thoroughly read the Lab syllabus for *Geology Lab*.
2. I understand the policies, requirements and expectations for this course.
3. I understand the grading procedure (quiz and exam dates, breakdown of grade percentages).
4. I understand that I am responsible for dropping myself from this course should I stop attending *Geology Lab*.
5. I understand that success in *Geology Lab* is directly related to my attendance, completing assignments on time and adequate **STUDY** and preparation time.

Student signature: _____

Assignment 1 - Turn in with syllabus acknowledgment

Letter to your *Geology* instructor
Jack Pierce

I would like you to write a **ONE page** letter to me, Jack Pierce. In your letter, I would like you to describe why you are taking this earth science lab class. Additionally, tell me your science background (science classes you have taken), various math classes taken, your college major and what you would like to get out of a geology class. Please provide a double spaced, type written letter.

