

# Earth Science - Lecture- Main Campus #CRN 71649

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Main Campus phone: 395-4391

**INSTRUCTOR:** Jack Pierce  
**OFFICE:** Main Campus, MS-27  
**OFFICE HOURS:** Posted on Website - [www2.bakersfieldcollege.edu/jpierce](http://www2.bakersfieldcollege.edu/jpierce)  
**REQUIRED TEXTS:** Visualizing Earth Science, Murak and Skinner  
(ISBN: 978-0-471-747055)  
Appropriate substitute text: Foundations of Earth Science  
*Lutgens and Tarbuck*, any edition (ISBN: 0-13-144750)  
Cornell Note Taking handbook, Pierce, 2008 (OPTIONAL)

**CLASS MEETINGS:** Monday, Wednesday 8:00 - 9:25  
MS2 - Lecture Hall

## COURSE DESCRIPTION (Catalog description)

Introduction to the fundamentals of Earth Science, including the solid Earth, atmosphere and hydrosphere, and the solar system. Studies interactions between Earth's systems including the rock cycle, weathering, the hydrologic cycle and climate. **Prerequisite:** Reading level 5 or 6. **Hours:** 54 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.1; IGETC 5.A.

## 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 basic geologic processes that shape the earth's surface; land features produced from erosional processes of water, wind and ice.
  - c. Understand the theory of plate tectonics and how tectonic plate interactions produce geologic environments and their associated rock types (igneous, sedimentary and metamorphic)
  - d. Understand how earth history is deciphered; geologic dating techniques, uniformitarianism vs. catastrophism, the geologic time scale
  - e. Understand the atmospheric processes that govern the earth's climatic patterns, weather systems, moisture, clouds and precipitation
  - f. Understand earth's place in the universe; solar system and beyond the solar system and laws that govern the universe; Universal gravitational, Kepler's laws of planetary motion.
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 and modern astronomy explained in lecture and the textbook
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](mailto: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 (661-395-4334), FACE 16, as soon as possible to better ensure such accommodations are implemented in a timely fashion."

## STUDENT TUTORING

Every student is entitled to tutoring services in the Learning Center (395-4430). It is your responsibility to maintain a record of your success in this course, if you are falling below your expectations seeking assistance from the tutoring center is highly advisable.

## ACADEMIC HONESTY

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 polices outlined in the Bakersfield College handbook.

## CELL PHONE and ELECTRONIC DEVICE USE DURING CLASS TIME

Cell phones and all other electronic devices must be turned off and stored away during class. If you are caught using a cell phone (talking, text messaging, playing games, ect..) **YOU** are disrupting the **INSTRUCTOR** and your classmates; therefore, you will be dismissed from class for the rest of the lecture. **YOU DO THE CRIME, YOU'LL MISS THE TIME**

## LECTURE EVALUATION

### **Exams**

There will be 2 major one-hour exams and 1 final exam. See schedule below for dates of exams and final exam. All exams will consist of a combination of multiple choice questions, fill-in-the-blank, short answer and your choice of essay question. Each exam is a closed book and closed note exam. For each exam, students will need to provide their own scantron for multiple choice answers (Scantron form 882-E) and at least 2 8x11 sheets of blank paper. Exams will most likely be administered on Wednesdays during the scheduled exam week.

### **Quizzes**

There will be 3 quizzes administered throughout the semester (See quiz schedule). Each quiz will cover the previous week's material and will be given at the end of the lecture hour on Wednesdays. At the end of the semester, the instructor will drop the lowest scored quiz before calculating the final grade. For each quiz, students will need to provide their own scantron for multiple choice answers (Scantron form 882-E). Students will **NOT** be able to use notes or a "cheat sheet". In other words, all quizzes are completed with closed notes and closed books. *"By failing to prepare, you are preparing to fail."* - Benjamin Franklin

### **Make-up Exams/Quizzes**

All exams are given once. If an exam is missed, the student will be expected to make up the exam the day the student returns to class - **No Exceptions!!!** Additionally, the makeup exam will not be the same exam previously administered. All quizzes are given **ONLY ONCE! NO MAKEUP QUIZZES WILL BE GIVEN.** If you miss a quiz, the instructor will count the missed quiz as your lowest score at the end of the semester.

### **Earth Science Preps (EP)**

E-prep (EP) chapter worksheets will be given to students prior to the upcoming lecture. All EP's will be accessible on the instructor's website ([www.2bakersfieldcollege.edu/jpierce](http://www.2bakersfieldcollege.edu/jpierce)). It will be the student's responsibility to access each EP. EP sheets are designed to allow the student to use their text book and preview lecture material before class discussion on that particular topic. Your completed EP will consist of the downloaded EP (blank) and your answers on separate pieces of paper which is **STAPLED TOGETHER !!!**. Each EP will be due the following week at the end of Wednesday's lecture. **The instructor will not accept late E-preps.**

### **Poster Board presentations**

At the end of the semester, each student will display a poster board that illustrates various Earth Science topics provided by the instructor. During week 3, the instructor will present specific guidelines for student poster board presentations and topics that students may choose. By week 3, students should be ready to choose their topic. For extra credit, students can present their poster board to the class during week 15. Student's participating in the poster board extra credit activity will have their names drawn to present their poster. Poster board presentations will take place the entire hour and half.

### **Earth Science Field Trips (optional)**

There will be two all day Saturday earth science/geology field trips conducted during the semester. Both field trips are optional for student attendance. However, students attending field trips will earn extra credit for both lab and lecture classes. In addition, students will see first hand field observations and gain a wider understanding of the earth they live on. Field trip one is scheduled for **Saturday, October 24<sup>th</sup>** and field trip two will take place **Saturday, November 14<sup>th</sup>**.

## HOMWORK

Earth Science is a subject that cannot be learned passively by simply reading a book. Learning, assimilating the information and finding interest in the earth, requires active participation both in the class and ON YOUR OWN. Students should answer end-of-the-chapter questions. Although I will not collect the end-of-the-chapter questions, I encourage you to complete chapter questions and make sure you understand the vocabulary as well as the concept. Additionally, I encourage students to properly use their Cornell Notes as study guides. You will almost certainly see various test questions on Earth Science concepts discussed in the questions at the end of each chapter as well as questions developed from your Cornell Note handbook. I strongly encourage your own questions in class as well --- There are no dumb questions.

## GRADING

Your final grade is based on the following percentage breakdown:

### Lecture evaluation

Exams	45%
Quizzes	20%
E-preps	20%
Poster board	15%
Total	100%

## Earth Science Lecture Schedule

Week 1	Aug 24-26 - <i>Chapt-1 Intro</i> , Attendance, Syllabus, Study Skills Overview
Week 2	Aug 31- Sep 2 <i>Chap-2 Minerals</i> , Building Blocks of rocks EP 1/2 DUE
Week 3	Sept 7-9 <i>Chap-3 Minerals</i> , Rocks EP 3 DUE.
Week 4	Sep 14-16 <i>Chap-3/4 Rocks/weathering of rocks</i> , - EP 4 DUE
Week 5	Sep 21-23 <i>Chap-7 Plate Tectonics</i> EP 5 DUE - <u>QUIZ 1 (weeks 1-5)</u>
Week 6	Sep 28-29 Review weeks 1-5 <u>EXAM-1 (weeks 1-5)</u> ,
Week 7	Oct 5-7 <i>Chap-5 Surface and groundwater</i> - EP 6 DUE
Week 8	Oct 12-14 <i>Chap-6 Deserts and glacial landscapes</i> , Desert/glacial features EP 7 DUE
Week 9	Oct 19-21 <i>Chap-8 Earthquakes/earth's interior</i> How safe are we? E-prep 8 DUE
Week 10	Oct 26-28 <i>Chap-9 Volcanoes and igneous activity</i> EP 9 DUE, <u>QUIZ 2 (weeks 6-10)</u>
Week 11	Nov 2-4 <i>Chap-10 Geologic Time</i> <u>EXAM-2 (weeks 6-10)</u> EP 10 DUE
Week 12	Nov 9-11 <i>Chap-14/15 - The atmosphere/atmosphere circulation</i> EP 11 DUE
Week 13	Nov 16-18 <i>The Global Warming debate</i> (FOR or AGANSIT) EP 12 DUE
Week 14	Nov 23-25 <i>Chap 17 - Earth's place in the Universe - The solar system</i> EP 13 DUE
Week 15	Nov 30 -Dec 2 <i>Chap 17 - Earth's place in the Universe</i> , beyond the solar system EP 14 DUE Poster Board Presentations (WED) <u>QUIZ 3 (weeks 11-15)</u>
Week 16	Dec 7-9 - FINAL EXAM -Wednesday, Dec 9 <sup>th</sup> 8:00 AM - 9:50 AM

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

## SYLLABUS ACKNOWLEDGMENT

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

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Phone # \_\_\_\_\_

Email address: \_\_\_\_\_ (Print Clearly !!!!)

1. I have thoroughly read the Earth Science lecture syllabus for ERS B10.
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 ERS B10 (CRN 71650).
5. I understand that success in ERS B10 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 Earth Science 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 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.

