

***Geology 9***

 ***Introduction to Earth Science***

***Reedley College, Spring 2012 Syllabus***

**Objectives:**

**Instructor:** Susan Bratcher **Class Number:** 57814

**Email:** susan.bratcher@reedleycollege.edu **Class Meeting:** Mon. & Wed. 4:00 pm to 5:50 pm

**Alternate Email:** subratcher@csufresno.ed **Class Location:** Phy 75

**Office Hours:** By Arrangement **Required Textbook:** Foundations of Earth Science,

**Voice Mail:** 559-278-2975 Lutgens & Tarbuck, 6th edition

This course is an introduction to earth science emphasizing K-6 teacher preparation with an emphasis on basic topics and principles in geology. Earth science topics include but are not limited to earthquakes, volcanoes, rock and mineral formation, oceanography, astronomy, and meteorology. The class is intended for transfer Liberal Studies Blended Major students.

**Attendance:**

It is imperative that you attend all of the class meetings. Because we only meet twice per week, one absence is a great deal of material missed. Every student is responsible for all material covered in class, whether or not they attended class or not.

**Make-ups:**

I understand that sometimes things happen that cannot be avoided. Because of this lowest quiz score will be dropped. Lab and exam make-ups **are not permitted** unless, due to extenuating circumstances, prior arrangements are made. **Late work is not accepted and quizzes cannot be taken at a later date.**

***Grade Breakdown***

*Participation 5%*

*Quizzes and Homework 20%*

*Lab Assignments 20%*

*Exams 40%*

*Presentation & Lesson plan 15%*

**Grade Scale**

|  |  |
| --- | --- |
| Grades | Percent |
| A | 89.5 - 100 |
| B | 79.5 – 89.4 |
| C | 69.5 – 79.4 |
| D | 59.5 – 69.4 |
| F | <59.5 |

Class Participation 5%

Involves professional attitude, preparation for class, involvement in activities, consideration of instructor, classmates and class materials, punctuality. I will not reward bad attitudes, tardiness, or absenteeism. Five points per day are awarded for participation.

Quizzes & Homework 20%

 All quizzes should be considered “pop” quizzes – many will be announced but not all. Most of the quizzes will be in class while others may be posted on blackboard. Any in class quizzes will be given in the first 15 minutes of class. No make-ups for quizzes will be given.

Lab Activities and Assignments 20%

 The lab portion of the class is worth 20% of your grade. Labs are due at the end of the lab period unless prior arrangements are made with the instructor. Any lab not turned in by the start of the next lab period will be considered a missed lab and constitutes as a zero. Labs may not be made up.

Exams 40%

4 Exams will be given for this class, 3 Midterms and a Final. Each exam will be worth 10%.The dates for all may be found in the schedule portion of this syllabus and students are responsible for knowing those dates. Missed exams cannot be made up.

Student Presentations & Lesson Plans 15%

Each student will be required to give a 10 – 12 minute presentation on an earth science topic. The primary purpose of the presentation is in introducing the class to an activity on a specific topic in Earth Science. There are 3 acceptable formats for your presentation. 1) a hands on activity which you do with the class as student participants, 2) a demonstration before the class where you demonstrate an activity that could be done in a classroom, or 3) a presentation  (for example, PowerPoint) showing an actual class project you have done with K-6 class showing us the results (photos, graphs, information from the experiment). Students may present by themselves or in pairs. If presenting as a group of 2 the time requirement extends to 20 minutes.

Each presentation must be accompanied by a lesson plan. Lesson plan should include the following sections. Introduction, Objective, Attention Grabber, Content, Activities and Worksheets (Hands on Activities, Visuals, & Worksheets), Assessment, Conclusions, and References Cited. The lesson plan should be typed/word processed. It should be a minimum of 2 pages in length with references cited.

**Important Presentation Dates:**

Topic Card Due: February 22nd

Presentation Overview / Summary Due: March 26th

Lesson Plans Due: at time of presentation

**Written Work:**

Please write all lab assignments neatly in **pencil** so that you can cleanly erase any mistakes. Deductions will be made for sloppy or disorganized work. Unless you are notified otherwise, the lab assignments are due at the end of the class session; take-home assignments are due at the **beginning** of the class.

**Working Conditions:**

Please be considerate of your classmates and instructor. Avoid talking when your instructor is talking, and help keep the lab clean and organized. Handle the lab materials with care.When you are ready to leave lab, please clean up your area.

**Do not write on, scratch, or stick gum on the countertops or furniture!!**

**No food or drink in the class! Please keep cell phones on “silent”.**

**Students with Disabilities**

If you have a verified need for an academic accommodation or materials in alternate media (i.e.: Braille, large print, electronic text, etc.) per the Americans with Disabilities Act or Section 504 of the Rehabilitation Act, please notify your instructor in writing (confidential) so that we can make the proper accommodations for you.

**“Academic Dishonesty**

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.” Reedley College 2010-2012 Catalog

**“Cheating**

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another’s work, supplying one’s work to another, giving or receiving copies of examinations without an instructor’s permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

**Plagiarism**

Plagiarism is a specific form of cheating: the use of another’s words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights. Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on the particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

**Authority and Disciplinary Actions**

Instructors shall be in charge of their classes and students are under obligation to respect the authority of each instructor. Reedley College seeks to develop responsible, democratic citizenship among the students enrolled. Students are responsible for their conduct. Failure to adhere to the college’s standards will result in disciplinary action. The college reserves the right to exclude at any time a student who violates student conduct standards and/or is not taking proper advantage of the opportunities offered. (See Student Right to Know on page 10 [of the Reedley College 2010-2012 Catalog]). Reedley College reserves the right to exclude at any time a student who, in the judgment of the administration, is not taking proper advantage of the opportunities offered.

**Removal from Class by Instructor**

Reedley College’s Student Code of Conduct Policy (Board Policy 5520 and Educational Code 76032) authorizes an instructor to remove a disruptive student from his or her class for the day of the removal and the next class meeting. The instructor shall immediately report the removal to the Vice President of Student Services. During the period of removal, a student shall not be returned to the class from which he or she was removed without the concurrence of the instructor of the class.” - Reedley College 2010-2012 Catalog

**HOW TO DO WELL IN THE CLASS:**

Most importantly – **show up** for class!

Some other tips include:

 • Read the associated textbook materials before class.

 • Arrive on time and stay the full period.

 • Follow the introductory lab lectures/discussions and take good notes.

 • Stay focused and work attentively throughout the class period.

 • DO YOUR OWN WORK (see cheating and plagiarism below).

 • Write clear and specific answers to the assigned questions.

 • Turn in all work on time.

Please note: This syllabus and schedule may be subject to change.

**If we did all the things we are capable of doing, we would literally astonish ourselves.**

**- Thomas Edison**

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| --- | --- | --- | --- |
| Date | Monday  | Date | Wednesday |
| 1/9 | Introduction to Earth Science & Scientific Method | 1/11 | Topographic Map Lecture |
| 1/16 | **No Class Martin Luther King Day** | 1/18 | Lab 1. Topographic Maps |
| 1/23 | Ch. 6 - Faults & EarthquakesCompleted Readings: pp. 170 - 196 | 1/25 | Lab 2. Faults & Earthquakes  |
| 1/30 | Ch. 5 - Continental Drift & Plate TectonicsCompleted Readings: pp. 140 – 169 | 2/1 | Lab 3. Continental Drift & Plate Tectonics |
| 2/6 | Ch. 1 -MineralsCompleted Readings: pp. 20 - 41  | 2/8 | Lab 4. Minerals |
| 2/13 | Presentation Workshop & Exam 1 Review | 2/15 | **Exam 1 Mineral ID** |
| 2/20 | **No Class President’s Day**  | 2/22 | Ch. 2- Igneous Rocks & VolcanoesCompleted Readings: pp. 42 – 54 & 206 – 235Presentation topic choices Due |
| 2/27 | Lab 5. Igneous Rocks & Volcanoes  | 2/29 | Ring of Fire |
| 3/5 | Ch. 2 - Weathering & Sedimentary RocksCompleted Readings: pp. 54 - 71 | 3/7 | Lab 6. Rock Cycle |
| 3/12 |  Ch. 3 - Surface water & Ground waterCompleted Readings: pp. 78 - 109 | 3/14 | Lab 7. Water and the Water Cycle |
| 3/19 | Presentation Workshop & Exam 2 Review | 3/21 | **Exam 2** |
| 3/26 | Ch 8. Geologic TimeCompleted Readings: pp. 236 – 257Rough Draft / Outline due | 3/28 | Lab 8. Geologic Time |
| 4/2 | Spring Break | 4/4 | Spring Break |
| 4/9 | Ch. 11 - Heating the Atmosphere & Reason for the SeasonsCompleted Readings: pp. 308 - 339 | 4/11 | Lab 9. Atmosphere & Seasons |
| 4/16 | Ch 14. Weather Patterns & Severe WeatherCompleted Readings: pp. 390-416 | 4/18 | Lab 10. Severe Weather |
| 4/23 | Ch. 15 - Nature of the Solar System Completed Readings: pp. 418 - 454 | 4/25 | Lab 11. Solar Systems & Exam review |
| 4/30 | **Exam 3** | 5/2 | Student Presentations  |
| 5/7 | Student Presentations | 5/9 | Student Presentations Final Exam Review |
| 5/14 | **Final Exam Monday May 14th from 4:00 pm – 5:50 pm** |

*Reedley College Spring 2012*

**Equipped with his five senses, man explores the universe around him and calls the adventure Science.**

**-Edwin Powel Hubble**