

## **SYLLABUS FOR GEOLOGY 9 – FALL 2021**

Class Meetings: M-F at Fowler High School

**Instructor:** Dr. David Tinker

**Contact info:** e-mail [david.tinker@reedleycollege.edu](mailto:david.tinker@reedleycollege.edu)

**Websites:** class materials will be uploaded to Canvas

**Office Hours:** by request

**Textbook:** There is no required text for this course. Useful references include: An Introduction to Geology (online textbook; link <https://opengeology.org/textbook>), Johnson, et al., 2017; Physical Geology (online textbook; link <https://opentextbc.ca/geology/>), Earle, 2015.

**Course Objectives:** Geology 9 is a survey course in Earth science. The goal of the course is to introduce the science behind structures and processes that affect humans every day. This is an introductory, general education course in geology appropriate for science majors and non-science majors. The curriculum is aligned with the requirements for prospective teachers.

### **Student Learning Outcomes (SLOs)**

1. Explain and apply the scientific method to problem solving across numerous disciplines.
2. Differentiate among the major Earth systems and describe how the systems are interconnected. Earth's systems include the hydrologic cycle, rock cycle, plate tectonics cycle, solar system, geologic time, weather and climate.
3. Describe basic physical properties of minerals and rocks and use appropriate methods to identify common minerals and rocks.
4. Utilize the plate tectonics theory to explain the distribution of Earth's major topographic features and the distribution of volcanoes and seismic activity.
5. Describe the forces and processes that shape the earth's surface and their effects over geologic time.
6. Describe and explain the controls of Earth's weather and climate.
7. Demonstrate a fundamental understanding of the significant role played by oceans in controlling Earth's weather, climate and biological systems.
8. Be able to explain and critique theories for the origin of the solar system and the universe.
9. Communicate complex course concepts effectively in writing and diagrams.

**Suggested Supplies:** calculator; ruler; protractor; pencil; different-colored pens (e.g., one blue, one red)

**Attendance:** Attendance in lecture and lab is mandatory. The student will be dropped automatically if she/he misses the first day of class, without contacting the instructor. If a student misses more than 25% of the lectures/labs, without contacting the instructor with a valid excuse, they will also be dropped.

Always inform the instructor ahead of time if you know you have to miss an exam; a missed exam with no prior warning will count as a zero grade. Unexplained, missed classes will not excuse missed homework assignments. If a student is disruptive (including using cell-phones, interrupting the instructor continuously) he or she may be asked to leave the lecture/lab and recorded as "absent."

**Cancelled Classes:** If for some reason a class is cancelled (i.e., I miss class for some reason), please complete the assignment posted on Canvas. Your activities for the day will also be posted to Google Classroom.

**Late Adds:** The last day to add this class in person is August 30. The last day to add this class using Webadvisor is September 2 (for this, you must have full access to Webadvisor). Please be aware that these are firm deadlines; mistakes such as forgetting to use an add code will not be forgiven. Any student who adds this class late forfeits the opportunity to complete assignments that were submitted before his or her add date.

**Grading :**

Quizzes	(10 %)	Quizzes may not be announced. There will be roughly one quiz every two weeks. They will generally be given at the beginning of a lecture period. A missed quiz will be entered as a zero grade. There are no make-ups. The three lowest quiz grades will be dropped.
Exams	(30 %)	Exams will be given on the posted dates. There will be no make-up exams. There will be no way (after an exam) to arrange a make-up. All mid-term exams will be weighted equally. The lowest exam score will be dropped when the final grades are calculated.
Final Exam	(10 %)	The final exam is required. It will be a cumulative, written exam given in class at the posted final time period.
Lab Exercises	(15 %)	Lab exercises will be collected at the end of each lab period. There will be no make-ups for missed lab exercises. The lowest five lab exercise scores will be dropped.
Homework	(10 %)	There will be one homework assignment each week. The assignments are designed to reinforce ideas from the lectures and reading material and to help you prepare for exams.
Discussion and Projects	(25 %)	<ol style="list-style-type: none"><li>1) You will benefit most from actively processing ideas presented in class. To help you with that process, some class days will be discussion days, when you will be expected to ask and answer questions. You will receive points for participating. Missed discussion days will result in scores of zero, which cannot be made up.</li><li>2) Applying the geology ideas to real-world examples is a very useful thing to do. You will be asked to complete a number of small research projects in which you apply some of the class ideas. Most often, these projects will culminate with graded presentations.</li></ol>

General Grading Break-down : **A** 90-100%, **B** 80-89%, **C** 70-79%, **D** 60-69%, **F** 0-59%

Please be aware of the following rules:

- Tardiness, leaving early, or sleeping during lectures will result in a partial or full absence being recorded. Students need to sign the sign-in sheet within the first 10 minutes of class. Students considered absent will forfeit their points for the day.
- Fraudulent behavior during exams is graded with a (0) zero.

- Copying of any class work is considered fraudulent behavior for both the copier and the originator and points (10-100%) may be deducted from both the copier and the originator. DO NOT HAND IN IDENTICAL HOMEWORK.
- No late work will be accepted (without prior discussion of validated, extenuating circumstances).
- No extra credit will be given. You need to work consistently from the beginning.
- It is expected that you will not use your cell phones during class. Use of your cell phone will result in a partial or full absence being recorded, and you will forfeit the points awarded for work completed that day. Please silence your phone during lectures so as not to disturb the class.
- No cell phones or other electronic devices will be allowed during exams.

**If you have a verified need for an academic accommodation (especially in labs) or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact the Disabled Student Services as soon as possible.** With this statement on my course syllabus, I am **referring** each of my enrolled students in need of academic support to **tutorial services**. Referral reason: Mastering the content, study skills, and basic skills of this course is aided by the use of trained peer tutors

**Tentative course outline:**

Week 1: Introduction to Geology and Plate Tectonics

Week 2: Minerals and Igneous Processes, pt. 1

Week 3: Igneous Processes, pt. 2 and Weathering

Week 4: Sedimentary rocks and Midterm 1

Week 5: Metamorphic Rocks and Geologic Time

Week 6: The Solar System and Earth History

Week 7: Crustal Deformation and Earthquakes

Week 8: The Earth's Interior and Mass Wasting

Week 9: Surface Water and Midterm 2

Week 10: Groundwater and Coastlines

Week 11: Deserts and Glaciers

Week 12: Oceans and Climate Change

Week 13: Extreme Weather and Midterm 3

Week 14: Nonrenewable Energy and Renewable Energy

Week 15: Atmospheric Circulation and Oceanic Circulation

Week 16: Topographic Maps and the Earth-Moon System

Week 17: Final Exam

## **Signatures**

Student and Parent/Guardian,

Please read the syllabus for Geology-9, which includes information about the expectations and grading for the class. Please understand that this is a Reedley College class. This means that there are some important differences between this class and a typical class taught at Fowler High School.

1. The grade earned in this class will be a college grade, so it will be on the students' permanent, post-secondary education transcripts.
2. Deadlines for dropping the class, filing grades, etc. are determined by the college; these dates are not under the control of Fowler High School or the course instructor.
3. Students will have access to their grades only by registering (through Reedley College) for the Canvas website for this course. There are rules against distributing grade information in any other way (including posting the grades on a Fowler High gradebook and telling parents the grades).
4. This class at Fowler High School is being taught the same way that the class is taught at Reedley College. In general, no late work is accepted. If students miss quizzes or exams, they will be given zero points for those assignments.

Signing below is confirmation that you understand and accept these restrictions.

If you have any questions, please contact me:

Phone: (559) 834-6160 (ext. 4403)

email: david.tinker@fowler.k12.ca.us

### **Student:**

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Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

### **Parent/Guardian**

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Parent/Guardian Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name