

Plate Tectonics

GEY 125

Class time and dates:

Saturday, November 8, 2014, 8:00 am – 5:30 pm, **and**
Sunday, November 9, 2014, 12:00 pm - 5:00 pm

Class Location: West Building 2573

Course Description: Presents the theory of plate tectonics and its relationship to continental movement, oceans, mountain building, earthquakes, and volcanoes.

There is no required text for this class.

Instructor: Dr. F. Nicole Peavey

E-mail: nicole.peavey@rcc.edu

Course Objectives: Upon completion of GEY 125, students will be able to:

- * Describe the internal structure of the earth
- * Define and discuss the theory of plate tectonics and its development
- * Describe the process of continental breakup and re-joining
- * Relate plate tectonics to the origin of oceans, mountains, volcanoes, and earthquakes.

Evaluation Methods:

Attendance = 20 points

Participation = 10 points

Group activity work = 20 points

In-class mini-quizzes = 10 points

Final take-home assessment = 40 points

TOTAL = 100 points

Grading Policy:

A = 90-100

B = 80-89

C = 70-79

D = 60-69

F = 0-59

Evaluation:

Latecomers will lose their attendance points (up to 10 points per day of class).

Participation credit will be awarded at 5 points per day for being attentive, participating in discussions, and responding to instructor prompts. Points may be deducted for napping in class or otherwise 'checking out.'

In-class worksheets will be submitted to the instructor for grading. Points may be reduced for an individual if it becomes apparent that the individual is not contributing to the group.

Understanding of the subject matter will be periodically evaluated with short, 1-2 question quizzes worth a small number of points, totaling 10 throughout the class.

A short, 2-4 page paper on a tectonics-related topic of the student's choice (subject to instructor approval) will take the place of a final examination, and will be due approximately one and one-half weeks after the end of class. Further instructions, a grading rubric, and a sample paper will be provided during class.

General Policies

Attendance: Because of the short-term nature of GEY 125, attendance is absolutely required for the totality of both class days, and any missed quizzes or assignments may not be made up. Please note that 60% of your grade is based on in-class work and attendance, making it impossible to pass without attending. **Latecomers will have their attendance/participation grade reduced by up to the maximum for the day.** Students are responsible for ensuring that they do not have previous commitments on class days. Incompletes will not be given; students who find themselves unable to attend class for emergency reasons will be responsible for initiating the drop or withdrawal process to prevent a grade of "F" being recorded for the class.

Assignments Policy: Due to very tight grade submission deadlines for weekend classes, all assignments must be submitted by their stated deadlines, and **NO credit, either full or partial, will be awarded for late assignments.** Students with deadline accommodations requested by the Office of Disability Services may have a separate agreed-upon deadline, but will not receive any credit for assignments submitted after that deadline.

In the event of a documented medical emergency that may prevent on-time completion of an assignment, the instructor should be contacted as soon as possible via an email stating the nature of the delay so that appropriate accommodations may be made and thoroughly documented with the college.

Academic Integrity: From the RRCC Student Handbook:

The College is an academic community. Its fundamental purpose is the pursuit of knowledge. Like all other communities, the College can function properly only if its members adhere to clearly established goals and values. Essential to the fundamental purpose of the College is the commitment to the principles of truth and academic honesty. Accordingly, The Student Code of Conduct is designed to ensure that the principle of academic honesty is upheld. Everyone associated with the College's academic community has a responsibility for establishing, maintaining, and fostering

academic integrity. Anyone who becomes aware of an incident of academic dishonesty should report the occurrence to a faculty member, department chair, or administrator. Those committing academic dishonesty will be subject to disciplinary actions which may include failing the assignment and/or the course, and/or being suspended or expelled from the college. Disciplinary procedures are outlined in Student Code of Conduct. Guidelines for the definition of cheating (Article I.I.) and plagiarism (Article I.J.) can also be found in the Student Code of Conduct.

The following are some principles associated with academic integrity:

- Cite (give credit for) words and/or ideas that are not your own
- Use information, computer programs, others' work, study aids, and/or other materials only when permitted by your instructor
- Remove materials from the library, labs, and other college facilities only when an official representative of the college grants permission
- Use copyrighted materials only with permission
- Refuse to help anyone commit an act of academic dishonesty
- Use only the resources specifically allowed when completing a test or other assignment

Class Project Policy regarding Academic Integrity: I check **every** paper for signs of plagiarism. Evidence of phrases pulled uncited or improperly cited from websites or other sources will trigger an automatic *minimum* 10% grade reduction, up to a maximum penalty of failure of the paper and the class. ALWAYS cite your sources. If you are not sure how to properly cite a source, or if the source needs to be cited, you can consult the writing center, a librarian, or a professor.

Learning or physical disability: ADAAA (Americans with Disabilities Act Amendments Act of 2008) and Section 504 of the Rehabilitation Act of 1973: Red Rocks Community College is committed to access for students with disabilities. If you are a student with a disability and need assistance or are interested in requesting accommodations, please contact the Office of Disability Services (ODS). Faculty is not obligated to provide accommodations without proper notification by the ODS. Students may contact the ODS staff by telephone or email to make an intake appointment at 303-914-6733 or ods@rrcc.edu. The ODS is located in Suite 1182 at the Lakewood campus. More information is available at www.rrcc.edu/disabilityservices.

Student Grievances: Please consult the Student Handbook.

Student Publications: *Claro*, RRCC's scholarly journal, publishes students' high-quality academic work. Publications look great on scholarship applications and resumes. If you feel that you have done superior work on an assignment for this class, ask me if I would consider submitting it to *Claro*! *Claro* accepts any type of academic work, including research papers, charts/graphs, reports, reviews, websites, videos, etc. Go to www.rrcc.edu/claro to view online versions of the last two editions.

Tentative Schedule:

Saturday, November 8

8:00am – 5:30pm

Syllabus and Introductions

Part I: The Continents Have Moved

Partial Topic List:

Evidence for Continental Motion

Map Puzzles

Properties of Igneous Rocks

How to Date Rocks

Part II: What Are Plates?

Partial Topic List:

The History of Plate Tectonics Theory

Kinds of Plate Boundaries

Paleomagnetism

Part III: How Do The Plates Move?

Partial Topic List:

The Internal Structure of the Earth

Convection and Hotspots

The Supercontinent Cycle

How Mountains Form

An optional class-related movie may be shown during the lunch hour if students wish to eat in the classroom.

Sunday, November 9

12:00pm – 5:00 pm

Part IV: Where Have The Plates Been?

Partial Topic List:

A Brief History of the Planet

Supercontinents

Foreign Terranes

Part V: Why Does It Matter?

Partial Topic List:

Geologic Disasters

Currents and Climate

Evolution and Speciation

Assignment of Final Project

Statement of Understanding of Syllabus Content

I, (student name, printed) _____,
certify that I have read and understood the syllabus for GEY 125 (Plate Tectonics), and that I
will abide by the policies stated therein. I take responsibility for knowing the class times and
assignment deadlines for this class, and I understand that missing these class times and deadlines
may result in a reduced or failing grade.

(Student Signature) _____

Please sign and detach this statement and submit to the instructor.