GRAYSON COLLEGE

Course Syllabus

Course Information

GEOL1303 Physical Geology and GEOL1103 Physical Geology Lab

Type of Course/Delivery Mode/Testing Requirements
Face-to-face on campus, 3 hour lecture/week, 2 hour lab/week, testing performed in class

Professor Contact Information
Instructor: Rick Lynn
Instructor's Phone Number: 903-463-8656
Instructor's email: lynnr@grayson.edu
Instructor's Office: S104
Science Department Office Phone: 903-463-8797
Office Hours: I will be in my office from 1:00PM until 3:00PM on Monday and from 11:00AM until 1:00PM in Thursday. If I am unable to assist you at that moment, I will let you know. I check my email and Canvas multiple times throughout the day and will respond as soon as possible.

Course Pre-requisites, Co-requisites, and/or Other Restrictions
Concurrent enrollment in GEOL1103 lab is required.

Although students must register for a separate course number, these sections (lecture and lab) are combined into a single course and are used together for meeting state core objectives (CS1, CT2, CT3, EQS2, and TW1), and for final grade calculations. Lecture work will make up 60% of the final grade and the remaining 40% of the grade will be from lab work. In some instances the courses will also be combined into one Canvas course shell where both lecture and lab work will be completed. Please see instructions when logging into the course online.

Course Description
GEOL 1403: Physical Geology-Principles of physical geology. Study of the earth's composition, structure, and internal and external processes. (R)

State Core Objectives that will be met in this combined Lecture and Lab course

- Communication Skills, CS1 – Students will develop, interpret, and express ideas through written communication.
- Critical Thinking Skills, CT2 – Gather and assess information relevant to a question.
- Critical Thinking Skills, CT3 – Analyze, evaluate, and synthesize information.
- Empirical and Quantitative Skills, EQS2 – Students will describe, explain, and predict natural phenomena using the scientific method.

- Teamwork, TW1 – Students will work cooperatively with their peers and leaders to more effectively solve problems by utilizing insights from multiple perspectives.

Student Learning Outcomes

- Describe how the scientific method has led to our current understanding of Earth's structure and processes.
- Interpret the origin and distribution of minerals, rocks and geologic resources.
- Describe the theory of plate tectonics and its relationship to the formation and distribution of Earth's crustal features.
- Quantify the rates of physical and chemical processes acting on Earth and how these processes fit into the context of geologic time.
- Communicate how surface processes are driven by interactions among Earth's systems (e.g. the geosphere, hydrosphere, biosphere, and atmosphere).
- Identify and describe the internal structure and dynamics of Earth.
- Describe the interaction of humans with Earth (e.g. resource development or hazard assessment).
- Classify rocks and minerals based on chemical composition, physical properties, and origin.
- Apply knowledge of topographic maps to quantify geometrical aspects of topography.
- Identify landforms on maps, diagrams, and/or photographs and explain the processes that created them.
- Differentiate the types of plate boundaries and their associated features on maps and profiles and explain the processes that occur at each type of boundary.
- Identify basic structural features on maps, block diagrams and cross sections and infer how they were created.
- Demonstrate the collection, analysis, and reporting of data.

Required Textbooks (ISBN # included) and Materials

The Changing Earth: Exploring Geology and Evolution, 7th Ed., Monroe and Wicander, ISBN 978-1-285-73341-8

Insights A Laboratory Manual for Physical & Historical Geology, 5th Ed., Ossian, C.R., ISBN 978-1-4652-5916-5

Suggested Course Materials

scientific calculator

Outline of Topics Covered-Lecture

Chapter 1: Understanding Earth: A Dynamic and Evolving Planet
Chapter 3: Minerals-The Building Blocks of Rocks
Chapter 4: Igneous Rocks and Intrusive Igneous Activity
Lecture Test One Chapter 1, 3, 4
Chapter 6: Weathering, Erosion and Soil
Chapter 7: Sediment and Sedimentary Rocks
Chapter 8: Metamorphism and Metamorphic Rocks

Lecture Test Two Chapters 6-8
Chapter 2: Plate Tectonics: A Unifying Theory
Chapter 5: Volcanism and Volcanoes
Chapter 9: Earthquakes and Earth's Interior
Lecture Test Three Chapter 2, 5, 9
Chapter 10: Deformation, Mountain Building and the Continents
Chapter 11: Mass Wasting
Lecture Test Four Chapters 10-11
Chapter 12: Running Water
Chapter 13: Groundwater
Lecture Test Five Chapters 12-13
Chapter 15: The Work of Winds and Deserts
Chapter 16: Oceans, Shorelines and Shoreline Processes
Chapter 14: Glaciers and Glaciation
Lecture Test Six Chapters 14-16

Outline of Topics Covered-Lab
This schedule may have to be modified.

Laboratory Topic
Chapter 1 Minerals
Chapter 1 Minerals
Chapter 2 Igneous Rocks
Chapter 3 Sedimentary Rock Identification
Chapter 4 Metamorphic Rock Identification
Chapter 5 Introduction to Maps and Mapping
Exam 1 Chapters 1 through 4
Chapter 6 Topographic Maps
Chapter 7 Pace and Compass Mapping (weather sensitive) (CS1, CT2, CT3, TW1, EQS2)
Chapter 15 Geologic Structures
Chapter 18 Geologic Maps Part One
Chapter 19 Geologic Maps Part Two, Chapter 20 Geology Lessons Learned from Maps
Exam 2 Chapters 5, 6, 7, 15, 18, 19, 20

In case of inclement weather, emergency closings, or other unforeseen disruptions to scheduled classes, student must log onto their Canvas accounts for directions on where or how to continue their coursework.

Methods of Evaluation
Six examinations will be given for the lecture and two for the lab throughout the semester. Dates of the examinations are in the syllabus, but may be changed if necessary. **There are no makeup exams or lab quizzes!** If you know you will be unable to take a test during the assigned time, contact me prior to the test to make arrangements to take the test at another time. Decisions concerning alternative testing times are strictly the discretion of the professor.

Any missed lab work, with the exception of lab quizzes and tests, must be completed within one week of the missed lab. If you miss a lab quiz because you are late for class you cannot make up the quiz.

Exams may consist of multiple choice, short answer, matching, fill in the blank, and/or essay questions.

The use of textbooks, class notes or on line resources is not allowed during any tests. Any student that violates the Student Academic Integrity Policy or any guideline regarding the use of textbooks, class notes or on line resources during tests will automatically receive a zero for the test.

A final exam will be given at the time scheduled by the college.

In the event that the total number of points on a test does not equal 100, the grade will be normalized to 100. For example, a score of 62 out of 80 would be a 77.5 (((62/80)*100)=77.5).

Grading

90.0-100=A
80.0-89.99=B
70.0-79.99=C
60.0-69.99=D
Below 60.0=F

Grade Calculation for the lecture portion of the course: Add all test scores+Extra Credit/6=Final Lecture Average

Grade Calculation for the lab portion of the course: ((Weekly Lab Average*.3)+(Lab Test One*.3)+(Lab Test Two*.3)+(Quiz Average*.1))=Final Lab Average

Grade Calculation for the entire course: (Final Lab Average*.4)+Final Lecture Average*.6)=Final Course Grade

I want to remind everyone, no professor “gives” a student a grade. The student earns the grade they receive.

Important Dates

Course & Instructor Policies

There will extra credit assignments available during the semester. The maximum amount of extra credit points for the semester will be determined based on the numbers of assignments and their complexity. Please do not ask as no other extra credit will be available.

Laboratory Safety Policy

1. In order to avoid creating unsafe situations professional, judicious, and safe conduct is required of each student.
2. Be aware of the potential of electrical shock when using the microscopes.
3. Laboratory samples are to be used with caution. Under no circumstances are laboratory samples to be moved in an inappropriate manner nor are they to be broken, chipped, or otherwise mutilated. No laboratory samples are to be taken out of the room at any time.
4. All chair legs are to remain on the floor at all times.
5. Report all accidents to the instructor and the campus police immediately.
6. Become familiar with the exits in case of fire.

Class Attendance

Academic success is closely associated with regular classroom attendance and course participation. All successful students, whether on campus or online, are expected to be highly self-motivated. All students are required to participate in courses regularly and are obliged to participate in class activities and complete and submit assignments following their professors' instructions. Students taking courses during compressed semester time frames such as mini-mester, summer sessions, and mid-semester should plan to spend significantly more time per week on the course. Responsibility for work missed because of illness or school business is placed upon the student. More than two (2) absences are considered to be excessive. In addition, students' eligibility to receive financial aid or live in a College dormitory can be affected by withdrawal from courses. When withdrawal occurs, any tuition refund would be made in accordance with state regulations.

Student Conduct & Discipline

Students are expected to maintain classroom decorum that includes respect for other students and the instructor. Prompt and regular attendance is required. Students must not disrupt the class or leave before class has been released. Students must maintain an attitude that seeks to maximize educational opportunities in the classroom. Failure to comply with proper classroom decorum will result in the student being dropped from the class.

All cell phones and other electronic devices must be turned off before entering the classroom. If you have an emergency and need to take a call during class, you must inform the instructor before the beginning of class. Turn your ringer to vibrate, and when your call comes in, pick up all of your belongings and leave the classroom. You may return to class the next time the class meets. In the event that I see your cell phone out during class, your cell phone rings during class or I catch you leaving class to answer you cell phone, I will **deduct 10 points** from your next lecture test. Each violation of this policy will result in a 10 point deduction on the next lecture test.

Under no circumstances will any electronic devices, except calculators, be allowed in the classroom during a test. You CANNOT use the calculator on your cell phone!

Defacing College Property
Anyone caught defacing property or damaging equipment in the lab or lecture room will be responsible for cleaning, repairing or replacing the defaced property or damaged equipment. **The individual will receive a zero (0) for the next lecture or lab test.** A grade of zero received for defacing property cannot be replaced. Defacing property includes, but is not limited to, writing, marking or scratching on the tables, tabletops, chairs, cabinets, counter tops, shelving or walls.

Academic Integrity
The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic Dishonesty, any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the college's policy on plagiarism (see GC Student Handbook for details). Grayson College subscribes to turnitin.com, which allows faculty to search the web and identify plagiarized material.

Withdrawal from Class
The administration of this institution has set deadlines for withdrawal from any college-level courses. These dates and times are published in that semester's schedule of classes. Administrative procedures must be followed. It is the student's responsibility to handle student initiated withdrawal requirements from any class. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled (see Grayson College Catalog for details).

TITLE IX
GC policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status. Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation.
For more information on Title IX, please contact:

- Dr. Regina Organ, Title IX Coordinator (903-463-8714)
- Dr. Dava Washburn, Title IX Coordinator (903-463-8634)
- Dr. Kim Williams, Title IX Deputy Coordinator- South Campus (903) 415-2506
- Mr. Mike McBrayer, Title IX Deputy Coordinator (903) 463-8753
- Website: http://www.grayson.edu/campus-life/campus-police/title-ix-policies.html
- GC Police Department: (903) 463-8777- Main Campus (903) 415-2501 - South Campus)
- GC Counseling Center: (903) 463-8730
- For Any On-campus Emergencies: 911

Grayson College is not responsible for illness/injury that occurs during the normal course of classroom/lab/clinical experiences.

These descriptions and timelines are subject to change at the discretion of the Professor.

Grayson College campus-wide student policies may be found on our Current Student Page on our website: http://grayson.edu/current-students/index.html