

Course: GEOL157 Introduction to Geology

Professor: Gregory C. Herman, email: Gregory.Herman@raritanval.edu

Office Hours: By appointment

Department Chair: marianne.baricevic@raritanval.edu

Course Description

- This course is a study of the earth's structure, composition and history; processes which shape the earth's surface, such as glaciation, crustal movements and tectonics, erosion, and sedimentation; fossil study; classification and characterization of rocks; applied geology of mineral, energy, water and ocean resources; and of natural hazards. Laboratory activities include rock classification, air photo and topographic map interpretation, practical problems in environmental geology, and trips to field locations in New Jersey. One half-day field trip is required.

Required textbook and lab manual

- Monroe, Wicander, and Hazlett (2007) *Physical Geology; Exploring the Earth*, 6th edition ISBN-10:0-495-01148-7
- **RVCC GEOL 157 Introduction to Geology Lab Manual** by G.C. Herman provided as a PDF document for students to print their own, or purchase a hardcopy from a custom-printed batch.

Attendance Policy

Attendance at all class sessions (lecture and lab) is mandatory. Students are expected to attend all classes for every course in which they are enrolled. A record of attendance will be kept. To accommodate students' reasonable, personal situations that might prevent them from attending classes, each student is entitled to excused absences amounting to the equivalent of one week's class time in a semester. Absences in excess of this standard are handled individually by each faculty member. A student with absences amounting to one-fifth or more of the term's lecture or laboratory classes may be recommended to withdraw from the course.

Reasonable Accommodation Statement

Students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course MUST provide documentation of accommodations from the RVCC office of Disability Services, C143. No accommodations will be made without this documentation.

Student Learning Outcomes

Educational Goals

Students will:

1. Demonstrate an understanding and appreciation of the natural geological environment; its past and present; its importance in human histories and
2. Apply their knowledge in laboratory and field settings, writing essays or reports that reflect and analyze their experiences.

Learning Outcomes

The student will be able to:

1. Identify various minerals and rock types and associate them with geomorphic processes
2. Identify various fossil animal and plant types and associate them with geologic time.
3. Explain crustal movements and plate tectonics, and relate these to particular events of continental drift, mountain building and subsidence.
4. Explain the many variables affecting geologic water resources -- geomorphology, aquifers, topography, and erosion.
5. Apply geologic principles to evaluating land use policies.
6. Describe and explain the varied geologic history of the New Jersey landscape.
7. Identify the geological processes which produced fossil fuel energy resources and those which produce geothermal energy.

Grading System

- Class lecture attendance is kept. 21 lectures total, each counting 2 pts. (~10% of the class grade).
- 2 bonus point for perfect attendance
- Laboratory attendance is kept. Attendance and completion of work for the 10 labs and one field trip weigh heavily toward the final grade (~50% of the class grade).
- Exams include 20 True/False questions and 30 multiple choice.
- The final grade for the student is determined using the point system below and the grading scale to the right:

○ Point Components	Points	A ≥ 90
○ Lecture attendance	42 (2 pts. X 21 lectures)	B+ = 85 - 89
○ 10 Laboratories (10 pts. each)	100	B = 80 - 84
○ 1 Field trip (10 points)	10	C+ = 75 - 79
○ 3 exams (2-25, 1-50 pts.)	100	C = 70 - 74
○ Term paper	5	D = 60 - 69
○ TOTAL	257	F ≤ 59

Course Management Statement

- The class will be managed through the following Internet URL known as the course web site:

<http://www.impacttectonics.org/GEOL157/Index.html>

- Assignments and tests results will be presented to students the following week after their completion.
- Students will have the opportunity in class to ask questions on individual test questions and concepts.
- Students will have the opportunity at the end of the course to evaluate the instructor and course by standardized evaluation questionnaires.

Delayed Opening Policy

- If the College announces a delayed opening at any location due to inclement weather or other emergency situation, all offices will be closed and all College classes and/or other activities will be suspended at that location until the delayed opening time.
- Classes scheduled to begin before the delayed opening time that have 60 minutes or more of instruction time remaining at the delayed opening time will begin at the delayed opening time and conclude at the regularly scheduled ending time.
- Classes scheduled to begin at or after the delayed opening time will meet as scheduled

Credit Hour Equivalency Statement

- Students should expect to spend a minimum of 6 hours per week studying course concepts and reading outside of class.

Code of Conduct Statement

- The College has a Code of Student Conduct that states: "Faculty members have the authority to take actions which may be necessary to maintain order and proper conduct in the classroom. Students whose behavior disrupts the class will be subject to removal and may be charged with a violation of the Code of Student Conduct. Code of Conduct charges will be investigated by the Dean of Student Services. If the student behavior presents a concern for immediate safety of the student or members of the community, the student may be suspended until a hearing is held. Any student who is removed from a class against his/her will is entitled to a hearing."

WITHDRAWAL FROM COURSE

- Students may withdraw from this course following procedures specified by the Office of Enrollment Services and in compliance with published deadlines. Students who cease attending classes and do not request an official withdrawal will receive a failing grade (F) for the course.