

Course: PHY120A Introduction to Geology

Professor: Gregory C. Herman, email: hermang@tcnj.edu

Office Hours: By appointment

Department Chair:

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.

COVID-19 Statements

- ***Due to the serious nature of COVID-19, the class itinerary and conditions limiting personal contact may change at a moment's notice.** Please check your email frequently throughout the semester to keep current with school- and class-issued advisories and changes in school opening and access.*
- ***If you are coughing and sneezing, feel, ill, or suspect that you've been exposed to a contagion, please avoid coming to class.** Email me to arrange alternative methods of meeting the class objectives or consider withdrawing if symptoms progress.*
- *We will be wearing face masks when inside school buildings*
- *When attending labs, hand sanitizer will be used before and after the labs and please try to avoid touching your face.*
- *Wear fresh face masks to each class. Wash them daily if they are cloth.*

On-line, open-source reading material

- An Introduction to Geology; Free Textbook for College-Level Introductory Geology produced by staff from the Salt Lake Community College (<http://opengeology.org/textbook/>).

Required lab manual

- **TCNJ PHY-120 Introduction to Geology Lab Manual** by G.C. Herman provided as a free PDF document for students to access on line
- **Optional Textbook**
- **Monroe, Wicander, and Hazlett (2007) Physical Geology; Exploring the Earth**, 6th edition

Course Management Statement

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

<http://www.impacttectonics.org/PHY120/index.html>

- Students are expected to read the OER link chapter the week the correlative lecture is given.
- My PDF lecture slides contain all of the exam material, but are abstracted highlights of each topic. If you miss the lectures, you must read the OER material!
- Timed exams will be given through CANVAS and taken outside of the classroom.
- 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.

Attendance Policy

Attendance at all lecture and labs is required whether it is virtual or face-to-face (F2F). Students are generally expected to attend classes in which they are enrolled. A record of attendance will be kept. Each student is entitled to two excused lecture absences and one LAB for the semester without penalty in order to accommodate personal situations that might prevent one from attending. 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 laboratory classes and field trip may be recommended to withdraw from the course. 2 bonus points is awarded to students having perfect attendance at the semester's end.

Grading System

- Class lecture attendance is mandatory and a record of attendance is kept.
- Laboratory attendance is kept. Attendance and completion of work for the 10 labs weigh heavily toward the final grade (~40% of the class grade).
- In lieu of personal attendance if TCNJ announces restricted campus access, Canvas exercises will be made available for a lab that will be require participation and worth the same points as the in-person classes.
- *Exams are administered on Canvas.* Each includes 20 True/False and 30 multiple choice questions;
- The final grade for the student is determined using the point system below and the grading scale to the right:

GR	Points	Grade Percent
○ Point Components		A ≥ 90
○ 22 lectures @ 2 pts each	44	B+ = 85 - 89
○ 3 exams (2-25, 1-50 pts.)	100	B = 80 - 84
○ 10 Laboratories (10 pts. each)	100	C+ = 75 - 79
○ Term paper	5	C = 70 - 74
○ TOTAL	249	D = 60 - 69
		F ≤ 59

The total points earned during the semester will be divided by the total number possible to calculate a percentage grade.

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 TCNJ office of Disability Services. 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.

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

- 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.

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

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.