DAKOTA COLLEGE AT BOTTINEAU

Course Syllabus

Course Prefix/Number/Title: GEOL 105, Physical Geology

Number of Credits: 4

Course Description: A lecture and laboratory study of the Earth as a physical body; its structure, composition, and the geologic processes acting on and within the Earth.

Pre-/Co-requisites: None

Course Objectives: Students will:

1) Understand the relationship of our Earth with the rest of the universe.
2) understand how the Earth works
3) understand how and why different kinds of substances are distributed on and in our Earth
4) Know how rocks and minerals are identified
5) be familiar with different geologic structures and how they are formed
6) understand that intelligently searching for metals, sources of energy, and gems is our responsibility.
7) Understand the Earth's position in the solar system

Instructor: Michelle Cauley

Office: Molberg 22 **Office Hours:** MWF 10:00 a.m – 12:00 p.m.

Phone: 701 – 228 – 5498 **Email**: michelle.cauley@dakotacollege.edu

Lecture/Lab Schedule: MWF 2:00 – 2:50 (Lecture)
TH 8:00 – 9:50 OR 12:30 – 2:20 (Lab)

Textbook: Physical Geology, by Steven Earle
Open Educational Resource Text (OER) Version:
https://open.umn.edu/opentextbooks/textbooks/269

Course Requirements: This is an introductory course that allows for building a foundation in many learning areas. Students are graded on various learning tasks including weekly assignments, quizzes, exams, and labs. Anything turned in late will receive 10% less credit for each week it is late. After 8 weeks, scores will remain at 0.

Course Grading Overview

Course Activity	Percentage of Final Grade
3 Unit Exams and 1 Final Exam	20%
Weekly Assignments	20%
Chapter Quizzes	10%
Weekly Lab Activities	30%
Professionalism	10%
Final Course Project	10%

Quizzes: There will be a series of 12 quizzes throughout the semester from various chapters. The lowest score will be dropped from your grade. All quizzes must be completed in order for one to be dropped. Syllabus quizzes will not be dropped, but students can take the Syllabus Quiz as many times as they would like to score 100%.

Labs: Labs will give an opportunity to connect lectures and readings with interactive and hands-on opportunities. Labs are the basis for our study and learning – labs are required. Missed labs must be made up within 3 weeks or missing labs will be given a score of 0. Many times, labs may overlap with athletic events. Please email and communicate with your instructor when you know you will be missing a lab and include available make-up times. Making up a lab is the responsibility of the student. After 3 weeks, the missing lab score will remain 0.

Assignments / Homework: There will be a combination of assigned readings, in-class worksheets, and traditional assignments. Homework must be submitted on time to receive full credit. 10% will be taken off per week if the assignment is late.

Unit Tests and Final Exam: There will be three unit-based tests and one final exam throughout the semester. These will be available to be completed online through Blackboard. Unit Tests and your Final Exam will be open for one week (seven days) and you will have unlimited time to take them within the test window.

Final Project: Students will select from various topics of interest for their final project. They will take their chosen topic and create a presentation and activity to showcase their knowledge of this topic.

Professionalism: Your grade will also be determined by your professionalism in this course. Attendance, timeliness in meeting deadlines, participation, engagement in learning, respectful actions, communication – these will all be factored into your final grade in this course. Just like in the real world, professionalism matters.

Tentative Course Outline:

Week / Dates	Reading Assignments	Lecture & Lab Topics	Quiz / Exam / Project Schedule
January 13 – 17	Syllabus and Chapter 1	*Intro to Geology* **NO LAB** this week	Syllabus Quiz
January 20 – 24	Chapter 2	Minerals	Quiz Ch. 2
January 27 - 31	Chapter 3	Intrusive Igneous Rocks	Quiz Ch 3
February 3 – 7	Chapters 4	Volcanism	Exam Unit 1: Chapters 1-4
February 10 – 14	Chapter 6	Sediments and Sedimentary Rocks	Quiz Ch 6
February 17 – 21	Chapter 7	Metamorphism and Metamorphic Rocks	Quiz Ch 7
February 24 - 28	Chapter 8-9	Measuring Geologic Time Earth's Interior	Quiz Ch 8-9
March 3 – 7	Chapter 10	Plate Tectonics	Exam Unit 2:Ch 6 -10
March 10 – 14	Spring Break	**No Lecture / No Lab**	
March 17 - 21	Chapter 11	Earthquakes	Quiz Ch 11
March 24 – 28	Chapter 14-15	Groundwater Mass Wasting	Quiz 14-15
March 31 – April 4	Chapter 16	Glaciation	Quiz 16
April 7 – 11	Chapter 17-18	Shorelines Geology of the Oceans	Exam Unit 3: Chapter 11, 14-16
April 14 – 18	Chapter 19	Climate Change	Quiz Ch 19
April 21 – 25	Chapter 20	Geological Resources	Quiz Ch 20
April 28 – May 2	Chapter 22	The Origin of Earth and Solar System	Quiz Ch 22

May 5 - 9	Non-Text Readings	Geology of North Dakota	Quiz
May 12 - 16	FINALS WEEK	**No Lecture / No Lab**	Final Exam (Ch.19, 20, 22 and Final Week)

General Education Competency/Learning Outcome(s):

1. Applies the Scientific Methods of Inquiry
    a. Utilizes the scientific process to solve problems.
    b. Interprets experimental data to draw logical conclusions
    c. Applies technology in the scientific process

Relationship to Campus Focus: A greater understanding of the Earth, its resources, and our connection to the planet's systems. Through this class we will explore how decisions in our lives impact the planet's resources and their viability for the future.

Classroom Policies:

- Students are expected to be polite and respectful of the instructor, other students, and any guests in our class. Earbuds are expected to be out of ears, phones on silent.
- Lecture outlines are available from the course shell. The outlines can be used to guide you in the understanding of material and are useful in notetaking.
- All assignments are due in a timely fashion. Each week an assignment is not turned in, 10% of the total score is lost.
- If a student is to miss an exam or quiz, it must be taken ahead of time for full credit.
- When in doubt – communicate! Email and office hours are the easiest ways to let your instructor know of any issues or emergencies that arise.

Student Email Policy:
Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Academic Integrity:
According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities or Special Needs:
Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX:
Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or

sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.

AI Student Policy:
Unless otherwise indicated in the course syllabus, or in individual instructions for course assignments, or in the absence of the express consent of the course instructor, students are not allowed to utilize generative AI to help produce any of their academic work. Any violation of this policy will be considered an act of academic dishonesty as outlined within the Dakota College Code of Student Life.

RESPONSIBILITIES

Students	• Responsible for following the syllabus and assignment instructions regarding use of generative AI for all academic work. • Obtain permission of the instructor prior to the use of generative AI that is outside of the syllabus or assignment instructions. Provide appropriate rationale for how the use of generative AI will enhance the learning experience for the assignment. • In instances where generative AI is permissible, appropriately cite the generative AI program used and indicate where in the assignment it was used, in a brief submission statement.
Faculty	• Determine if the use of generative AI could enhance student learning in any assignment of project. • Clearly indicate in all course syllabi if generative AI is allowable for any academic work. • If allowable, give specific parameters for how and when generative AI may be used. • If a violation of generative AI for the individual course/syllabus is suspected, discuss the concern with the student. If violation is still suspected, inform the appropriate semester coordinator/program director.