Dakota College at Bottineau Course Syllabus
Spring 2015

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

Number of credits: 4 Credits

Course Description: The purpose of this course is to present the various aspects of physical geology. Geology, the study of Earth, benefits everyone who lives on the planet.

Pre-/Co-requisites: none

Course Objectives: By the end of the course, you should be able to: 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. In addition we will work toward the regard of the environment and understanding of geologic hazards. Travel may be necessary to understand the role of Geology in everyday life.

Instructor: Angela Bartholomay

Phone: 228-5471

Email: angela.bartholomay@dakotacollege.edu

Textbook(s): Physical Geology by Plummer & Carlson 12th Ed.

Course Requirements:
Grades will be based on total points using the following percentage system:
100-90, A; 89-80,B; 79-70,C; 69-60,D; <60,F.
Assessment methods - measurement of the expected general education outcomes will be achieved through exams, quizzes, laboratory exercises and a final project.
Exams - There will be 5 exams during the course of the semester. All exams will be worth 100 points. If you are going to miss an exam, you are expected to make it up ahead of time. Make up exams will be different and will be worth 70%, which must be made up within a week following the original exam.
Lecture - Lecture outlines are available from the moodle shell. The outlines can be used to guide you in the understanding of the material and assist in note taking. Be prepared and have the outlines ready for class.
Quizzes - There will be 10-12 quizzes due each Wednesday. End of the chapter questions will be assigned will not be graded but may be used to assist you on the quizzes.
Laboratory - The laboratory portion of the course provides an opportunity to integrate lecture concepts with observable activities. There will be no make-ups for labs unless prior arrangements are made and the lab write-ups are due during the next lab period. No credit will be given for dry labs!
Final lab project - This scavenger hunt allows you to demonstrate what you have learned Throughout the semester.
Lecture Schedule | Reading assignment | Lab schedule
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Week 1 | Chapter #1 | p. 3-25 | No Lab
| Chapter #2 | p. 29-41 |
Week 2 | Jan 19th Martin Luther King Day- No Class | |
| Chapter #2 | p. 41-51 | Mineral identification |
Week 3 | Chapter #3 | p. 55-76 |
Week 4 | Chapter #4 | p. 83-109 | Igneous Rock identification
| Exam #1 | Chapters #1-4 |
Week 5 | Chapter #5 | p. 113-133 | Soil lab |
Week 6 | Feb 16th President’s Day – No Class | |
| Chapter #6 | p. 137-165 | Sedimentary rock identification |
Week 7 | Chapter #7 | p. 169-190 | Metamorphic rock identification |
Week 8 | Chapter #8 | p. 193-216 | Geologic time |
| Exam #2 | Chapters #5-8 | |
Week 9 | Chapter #9 | p. 221-244 |
| Chapter #10 | p. 247-280 | Fossil Lab |
**Spring break- March 16-20**
Week 10 | chapter #11 | p. 283-303 | Ground water |
**Easter Break April 3-6 No Class**
Week 11 | chapter #12 | p. 307-335 |
| Exam #3 | Chapters #9-12 |
Week 12 | Chapter #15 | p. 383-403 |
Week 13 | Chapter #16 |
Week 14 | Chapter #19 | p. 407-438 | Earthquake location lab |
Week 15 | chapter #20 | p. 491-522 |
| Chapter #21 | p. 527-548 |
Week 16 | chapter #22 | p. 551-579 | Final Lab presentations |
| Exam #4 | Chapters 15,16, 19-22 |
**Week 17**
| Final Exam |
General Education Goals/Objectives: 1) For a student to have a greater appreciation and understanding of the Earth on which they live and depend. 2) For each student to be able to use the knowledge they obtained in their future.
Relationship to Campus Theme: A greater understanding of the Earth, Earth’s resources and its companions in the solar system will lead to a greater respect for the environment. Components of technology will lead to this understanding. Students will explore career options for their future.
Classroom Policies: Attendance in class is expected at every lecture and laboratory period. If you are absent, please find another student to obtain the notes. For an exam, if you know you will be absent from class or if you are ill, please notify me, prior to the exam, so that the exam can be rescheduled. If I am not notified your test will be worth 70%. Quizzes cannot be made up unless prior approval has been made. All make-up work must be completed within one week.
Academic Integrity: Academic honesty is expected, any violations is sufficient grounds for immediate failure and removal from class. Cell phones must be turned off during class time.
Disabilities and Special Needs: Any student who has a disability that may prevent them from fully demonstrating their abilities should contact the instructor to discuss accommodations necessary to ensure full participation and facilitate his or her educational opportunities.