

**Dakota College at Bottineau Course Syllabus  
Spring 2014**

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.**

Instructor: **Angela Bartholomay**

Phone: **228-5471**

Email: **angela.bartholomay@dakotacollege.edu**

Textbook(s): **Physical Geology by Plummer & Carlson 12<sup>th</sup> 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. The exam questions will originate from lectures as well as end of the chapter questions.**

**Quizzes- There will be 10-12 quizzes. End of the chapter questions 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 and the lab write-ups are due during the next lab period.**

Lecture Schedule		Reading assignment	Lab schedule
Week 1	Chapter #1	p. 3-25	No Lab
	Chapter #2	p. 29-41	
Week 2	Jan 21 <sup>st</sup> Martin Luther King Day- No Class		
	chapter #2	p. 41-51	Mineral identification
Week 3	Chapter #3	p. 55-76	
Week4	Chapter #4	p. 83-109	Igneous Rock identification
	<b>Exam #1</b>	<b>Chapters #1-4</b>	
Week 5	Chapter #5	p. 113-133	Soil lab
Week 6	Feb 18 <sup>th</sup> 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
	<b>Exam #2</b>	<b>Chapters #5-8</b>	Fossil Lab
Week 9	Chapter # 9	p. 221-244	
	Chapter #10	p. 247-280	
<b>Spring break- March 17-21</b>			
Week 10	chapter #11	p. 283-303	Ground water
Week 11	chapter #12	p. 307-335	
	<b>Exam #3</b>	<b>Chapters #9-12</b>	
Week 12	Chapter #15	p. 383-403	
Week 13	Chapter #16		
	<b>Easter Break April 18-21 No Class</b>		
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
	<b>Exam #4</b>	<b>Chapters 15,16, 19-22</b>	
	<b>Final lab project</b>		
<b>Week 17</b>	<b>Final Exam</b>		

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.**