Physical Geology

GOL 105

Spring 2015

"In every outthrust headland, in every curving beach, in every grain of sand there is the story of the earth."
- Rachel Carson

Instructor:
Pete Berquist
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Office & hours:
Hastings 303 (Hampton)/236 (HT)
Mon & Wed 11am-12:30pm (HT)
Tue 2-3pm, Tu & Th 10:30 am – 12:30 pm Hamp
…And by appointment, esp Friday

Tentative class schedule. This schedule is subject to change. If in doubt, contact your instructor.

Week	Lecture Topic
1 *1/12*	What is Geology & The Nature Of Science
2 *1/19*	Formation and interior of Earth *No Class Mon, 19 Jan.*
3 *1/26*	Earth Materials, minerals, and economic resources; **NOTE: 29 Jan Last Day to Drop and Get Refund**
4 *2/2*	Igneous Rocks & Volcanoes
5 *2/9*	Weathering, Sedimentary Rocks & Depositional Environments
6 *2/16*	**Exam I** & Metamorphic Rocks
7 *2/23*	Plate Tectonics and dynamics of the earth's crust
8 *3/2*	**SPRING BREAK – No Classes This Week**
9 *3/9*	Plate Tectonics and dynamics of the earth's crust
10 *3/16*	Structural Geology and Crustal Deformation
11 *3/23*	Earthquakes **NOTE: 26 Mar Last Day to Withdraw**
12 *3/30*	Geologic Time & geologic history
13 4/6	**Exam II** & Carbon & Climate, Part 1
14 4/13	Carbon & Climate, Part 2
15 4/20	The Groundwater System – you don't get groundwater for free What Water Does on the Surface - Mass Wasting & Stream Processes
16 *4/27*	Coastal Processes – time to study the beach
17 5/4	Glaciers, Global Climate Change

Course Description

For the next 17 weeks we will explore Earth, both inside and out, by learning 1) what it is made of and 2) the processes which modify it. Geology can be abstract at times, so the assignments, labs, and field excursions are vital in providing practical supplements to lectures and readings. By the end of the term you should be more familiar with geologic processes, terminology, resources, and connections with our daily lives (including careers in the geosciences).

Grading

A student's grade will be determined by in-class and out-of-class assignments, weekly quizzes, exams, projects, labs, and participation. To receive full credit, all assignments must be turned in on the assigned due date. Late assignments MAY be accepted for partial credit 1) at the discretion of the instructor and 2) within one week of the assigned due date. No make up quizzes will be given.

Final grades will be calculated as follows:

Weekly quizzes	15%
Lecture assignments	10%
Lab	25%
Exams	40%
Participation	10%

Grading Scale

A = 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
F = below 60%

Expectations & How to be successful

I expect all students to be present on time and ready to participate in lecture and lab. No late or make-up quizzes or labs will be offered. However, you may drop your two lowest quiz grades. Tests and quizzes will come in many different formats, including, but not limited to: short-answer, true/false, multiple choice, hand-sample identification, in-class, on-line, closed-notes, and take-home.

Participation

What does participation mean? In this course, I will evaluate your participation on

- Your preparation for lectures and labs (that means reading BEFORE hand)
- your contribution to creating a productive learning environment
- your involvement in the lecture, lab, and field

Class Policies

STUDENT RESPONSIBILITY is to comply *with policies in the Student Handbook to include but not limited to: Code of Ethics & Dress Code; Student Behavior Policy and Procedure; Student Code of Conduct; and Scholastic Honesty. Additionally, take note of Policies and Regulations - Contagious Disease Procedure; Repeated Course Policy, Respect for Copyrights, Including Software or Digital Media, and Disabled Student Services.*

Zero-Tolerance Cell Phone Policy

If you choose to use your cell phone, or any other digital communication device in class, then you will be asked to leave class and receive a zero for that day's participation grade. This includes hearing (including vibrate-mode) or seeing phones/devices activated for whatever reason. If any part of this policy is unclear, please meet with your instructor.

Course Description from the Course Catalog:

Physical Geology GOL 105 (4 credits) Prerequisite(s): ENG 05 and MTH 03 if required by individual student's placement. Introduces the composition and structure of the earth and modifying agents and processes.

Investigates the formation of minerals and rocks, weathering, erosion, earthquakes, and crustal deformation. Lecture 3 hours + lab 3 hours = total 6 hours per week.

Course Objectives:

1. To become familiar with the origin and composition of the basic rocks and minerals that composes the earth.
2. To become familiar with the major geologic processes that shapes the face of the earth
3. To become with the non-geologic (i.e. biological, hydrological, cryological, and atmospheric) processes that shape earth's surface.
4. To develop scientific reasoning skills.
5. To be able to use the scientific method to address geologic questions and problems.

Required materials

Lecture: Essentials of Geology, *S. Marshak, 2013, 4th edition*

Lab: Laboratory Manual for Introductory Geology, *Ludman & Marshak, 2012, 2nd edition*

Scholastic Dishonesty

…Generally, scholastic dishonesty is interpreted as cheating on an examination or quiz, which includes giving or receiving information; copying, using unauthorized materials in tests; collaboration during examinations; substituting for another person or allowing substitutions during examination; plagiarism, submission of work other than one's own; and collusion with another person or persons in submitting work for credit unless such collaboration is approved in advance by the instructor.

Plagiarism at Thomas Nelson Community College will constitute a dismissible offense, and the use of syndicated research papers, essays, etc., constitutes a violation of this rule…

Student Behavior - Disruptive

…Disruptive behavior is defined as repeated, continuous, and/or multiple student behaviors that interfere with the ability of instructors to teach and students to learn. Disruptive student behavior in a classroom or other learning environments (to include on-campus, off-campus locations and activities), will not be tolerated and is unacceptable in the TNCC community. Specific examples of disruptive behaviors include, but are not limited to:

- Persistent personal conversations with other class members;
- Eating in class;
- Monopolizing classroom discussions;
- Failing to respect the rights of other students to express their viewpoints;
- Talking when the instructor or others are speaking;
- Constant questions or interruptions which interfere with the instructor's presentation;
- Overt inattentiveness (e.g., sleeping or reading the paper in class);
- Creating excessive noise with papers, book bags, etc.;
- Entering class late or leaving early;
- **Use of pagers or cell phones in the classroom;**
- Inordinate or inappropriate demands for time and attention;
- Poor personal hygiene (e.g., noticeably offensive body odor).

More extreme examples of disruptive behavior include, but are not limited to:

• Use of profanity or pejorative language; • Intoxication; • Verbal abuse (e.g., taunting, badgering, intimidation); • Harassment (e.g., use of "fighting words," stalking), • Threats to harm oneself or others; • Physical violence (e.g., shoving, grabbing, assault, use of weapons)….

--Excerpts from http://www.tncc.edu/documents/studenthandbook.pdf (8/19/13)

My signature demonstrates that I have had the chance to read, ask questions, and understand TNCC's policy on academic dishonesty, disruptive behavior, and the Student Code of Conduct. I agree to abide by these policies.

_____

Printed Name

_____ _____

Signed Name *Date*