**STEM METHODS INTRO-GEOLOGY (GEOL 288-A)**

**S-Term 2016**

**Instructor:** Dr. Tim Flood

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**General Information:**

**Course Meeting Time**: M-W 11:30 a.m.-12:30 a.m.

**Office hours*:* T**WF11:00 a.m.-11:50 a.m. or by appointment or drop-in.

T**extbook and other materials:** The following book is inexpensive and sufficient for this course as a reference. It is not required. I will also have copies of regular intro geology textbooks available for you to use if needed.

(OPTIONAL) Spooner, A.M., 2011, **Geology for Dummies**: John Wiley & Sons, Inc., Hoboken, New Jersey, 360 pages (available via several online booksellers).

**Course Overview and Objectives**

 Geology is the study of the origin, composition, structure, processes, and history of the Earth. The science of geology is truly interdisciplinary because it utilizes the fundamental concepts of chemistry, physics, biology, and mathematics. What distinguishes geology from other science disciplines is the constant consideration of spatial (space) and temporal (time) relationships in the study of geologic phenomena. The objective of this course is to introduce you to the basic concepts and terminology of physical geology. We will focus on topics such as the unifying theory of plate tectonics, earthquakes, volcanism, and mountain building--namely those processes driven by the internal energy of the Earth. We will also study the major surface processes, driven primarily by solar energy, that shape our planet—for example the work of streams, glaciers, and wind. Finally, throughout the course we will discuss examples of the important interplay between geologic processes (and products) and humans. At the conclusion of the course, my hope is that (1) you will have both an appreciation for and a solid understanding of how the Earth works (physical geology), and (2) you will also understand how geology and humans are intimately linked on planet Earth.

 This course specifically addresses two goals of the new SNC Core Curriculum: Goal 1--understanding the world and one’s place in it, and Goal 2--the acquisition of intellectual and cognitive skills.

 Our course objectives will be achieved through lectures, discussions, and exercises emphasizing “how we know” in addition to “what we know” about the Earth. Class participation and questions are strongly encouraged. The lecture portion of the course will include PowerPoint presentations to illustrate geologic features discussed in class. Films will be shown on occasion. Please note that students are responsible for the content of these materials in addition to lecture notes and material assigned from other sources. The exercises will focus on basic geologic techniques such as rock and mineral identification, topographic and geologic map reading, and geologic problem solving.

**EVALUATION**

Your grade for this course will be divided between lecture (70%), special projects (20%), and lab (10%). The lecture portion will consist of quizzes (50%) and a final exam (20%). Approximately seven quizzes will be given, with the lowest one dropped. Quizzes will be given mostly every other Wednesday and will be based on lecture material from the previous two weeks plus weekly reading assignments. Because the lowest quiz will be dropped, makeups will generally not be given. A cumulative final (20%) will comprise the remainder of the lecture evaluation. Special projects (20%) will be designed specifically for this course and will involve “teaching” about the science that you have learned. The laboratory portion (10%) will consist of quizzes after units and grading of assignments.

**SUMMARY OF GRADING**

Lecture 70% -- 50% Quizzes, 7 best of 8

 20% Cumulative final

Projects 20%

Laboratory 10% -- 10% Quizzes and assignments

The course grading scale is as follows:

A = 92-100 BC = 79-81 D = 60-68

AB= 89-91 C = 72-78 F = <60

B = 82-88 CD = 69-71

**ATTENDANCE AND HONESTY:**

Attendance will not be taken on a daily basis. **HOWEVER**, quizzes will be taken from daily presentations. A simple equation is **“poor attendance = poor quiz performance”.** Honesty in all endeavors is expected. In this course, all students are expected to adhere to the College's academic policies regarding academic integrity (please refer to the "St. Norbert College Academic Honor Code” listed in *The Citizen,* or see the Honor Code website for the text of the Honor Code process, procedures and penalties). For further details - or if you have any questions, see the link for *The Citizen* on the judicial affairs website: [www.snc.edu/judicialaffairs](http://www.snc.edu/judicialaffairs) or contact the Honor Code Facilitator at x3047 or the Associate Academic Dean’s Office at x4044. We will follow the guidelines of the St. Norbert College Academic Honor Code.

**STUDENT SERVICES:**In keeping with the St. Norbert College mission to help students develop their full potential, and in compliance with the Americans with Disabilities Act, the College provides supportive services to students with disabilities. For enquiries and details, please visit the Academic Support Services Office located on the lower level of the John Minahan Science Building (JMS) or contact the Coordinator of Services to Students with Disabilities (Phone: 403-1326), or visit the website.

**Writing Across the Curriculum:** The Writing Across the Curriculum Program (WAC) requires that all lower-biennium courses have a writing dimension that includes writing-to-learn exercises, essay exams, and a formal out-of-class writing assignment. The WAC requirements for this course will be satisfied in the following ways: (1) Each exam will have at least one essay-type question in which students are required to formulate and write a coherent paragraph; (2) Exercises will include questions that require short written answers. More information on the WAC program and writing assignments will be given in class during the course of the semester.

**In Conclusion:**The policies noted above are flexible and subject to change depending on the interests of the students and instructor, or in the event of extenuating circumstances.