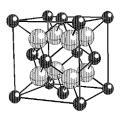
Fig. 5.

Introduction to Geology (EASC 116)

Course Syllabus



Instructor: Clark Ingwersen **Office:** Science Office-MHS

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Required Text:

- Tarbuck, E. J. and F. K. Lutgens, <u>Essentials of Geology</u>, 14th ed., Upper Saddle River, NJ, Prentice-Hall, 2009.
- Supplementary reading and materials will be assigned as needed

GENERAL INFORMATION- INTRODUCTION TO GEOLOGY

- Catalog Title: Description: This course is a survey of Planet Earth designed as an introduction for beginning students. It includes the study of earth materials and processes that shape our planet such as earthquakes, volcanic activity, mountain building, rivers, glaciers, and more.
- Prerequisite: None
- Contact hours: Three lecture hours and two laboratory hours per week
- Credit: Four semester hours (If you have registered at ICC)

Course Objectives

- To gain insight into how geologists apply the scientific method to solve geologic problems
- To apply knowledge of internal and external Earth processes in order to understand the interaction between the Earth and humans
- To gain an appreciation and understanding of geologic time; its magnitude and measurement
- To be able to describe and classify common rocks and minerals
- To analyze topographic and geologic maps in order to interpret the geology of a region
- To engage students in active field work in which observations are recorded and analyzed, and the conclusions are effectively communicated

Tips for Success

- **Preview the lecture material.** This will help you thoroughly understand the material when we cover it in class.
- Take good notes. Part of being successful in class is knowing what was discussed and what key concepts were focused on. Also, jot down any questions that you have during class or while you're reading your textbook.
- **Read in small, concentrated doses.** Each chapter is broken up into separate ideas. Read a section, and then stop to review what you've learned. Underline a few key ideas, not every single word
- **Focus on key concepts.** Our textbook places key concepts in blue boxes. Make sure that you understand the core ideas prior to filling in the small details.
- **Don't miss class.** Participating in lectures and labs is crucial to understanding the material. Also, not all material for the course will be found in the textbook and can only be learned in the classroom.
- **Budget your time.** Studying daily and reviewing what you've learned is much more effective than cramming for a test.
- **Enjoy the class.** The ocean is huge and so are the possible topics. If there's something you want to know, feel free to ask about it during class or after class. Take this opportunity to enrich your knowledge about the ocean.

Student Workload

• In an introductory course, given the amount of material to cover during one semester, it is easy to get behind. In this class we will constantly be building on what we have covered. Therefore it is particularly important to attend classes and to keep up with the reading, labs and study questions. As a general guideline, you should be spending about 2 hours outside class for every hour you spend in class. Good organization, time management, independence, positive attitude, self-advocacy, and reading, writing, and study skills are absolutely essential to success in this class. Keep up with assignments and readings, study hard, and contact your classmates and me when you have questions. The responsibility is on your shoulders...It's worth it - you'll never look at the world.

Grading

Assesments breakdown is tentatively as follows:

- 1. Laboratory studies
- 2. Quizzes
- 3. Practical laboratory examinations
- 4. Field exercises
- 5. Hour examinations
- 6. Final examination
- 7. Homework/Research

Grade Breakdown:

Total Points

Final letter grades will be assigned according to the final percentages:

A = 93-100% B = 92-85% C = 84-77% D = 76-70%

F = 69 and below%

Attendance

Your attendance is expected at every lecture and laboratory session for the entirety of the period. As students, you will be responsible for knowing the material covered in the course regardless if you were present for the discussion. You will also be responsible for turning in assignments on time even if you were not in class when it was assigned or when it was due.

Exams (To be announced)

All exams will cover the material give in lecture and in the textbook. The format of the exams may include such features as multiple choice, short answer, long essay, fill-in-the-blank, true or false, and figure drawing. The final exam will be comprehensive.

Make up exams will be given only if previous arrangements have been made. If an emergency arises and you need to take the test on a day other than scheduled you must talk to me prior to the test and schedule a date to take it. Make up exams may vary from the original exam given to the rest of the class.

Quizzes

Lecture quizzes will be given approximately each week prior to each exam. These quizzes are intended to prepare you for your upcoming test. They will consist of multiple choice and short answer questions. Quizzes will be given promptly at the beginning of class.

Appeal Process

Everybody makes mistakes, and you can expect them from me as well. If you have any questions as to how your exams/papers were graded please feel free to come and see me. If the mistake was made in adding up the points, come see me immediately. If you believe that a question was graded incorrectly, you must provide written documentation supporting your case. Written documentation may include a copy of the lecture notes, textbook, and/or scientific articles which support your case. All grade disputes must be settled within one week upon receipt of graded paper.

Late Work Policy

Late work will be penalized according to the student handbook. Please see me if you have any questions or concerns about late, or if you wish to explain your circumstances.

Cheating

Cheating and/or plagiarism will not be tolerated in this course. If you are caught cheating or plagiarizing then you may receive an F on the assignment, exam, or course according to the student handbook.

COURSE CONTENT

Lectures:

Introduction

Minerals

Igneous rocks and igneous activity

Weathering and soils

Sedimentary rocks

Metamorphic rocks

Mass wasting

Running water

Groundwater

Glaciation

Deserts

Waves and shorelines

Earthquakes and earth's interior

Plate tectonics

The ocean basins

Mountain building

Geologic time

Laboratories:

Mineral properties

Mineral identification: economic minerals Mineral identification: rock-forming minerals

Igneous rocks Sedimentary rocks Metamorphic rocks

Geologic time: relative and absolute dating

Introduction to topographic maps

Landforms: running water, glaciers, and groundwater

Earthquakes

Structural geology Field activities

Field trips

- -Rocky Glen (Peoria, Il)
- -Lick Creek (Marquette Heights, II)
- -Other location(s) to be announced