

HISTORICAL GEOLOGY AND LAB

Doane College

COURSE OUTLINE AND SYLLABUS

Course Number: Geo 104

Credit Hours: 4

Instructor: Charles Carpenter B.S., M.S.

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Materials Required: Textbook will be Historical Geology: Evolution of Earth and Life Through Time Fourth Edition by Reed Wicander and James S. Monroe. Other supplemental materials will be supplied by the instructor as required.
ISBN-10: 0534392873

Course Description: This course is a study of the major changes that have occurred to the Earth and its life over the last 4.6 billion years. Emphasis will be given to the geologic changes in North America. A special side note is that we will take a close look at some of the unique historical geology of Nebraska. As with all kinds of history, this course should enhance your appreciation of the present, and your view of the future, by showing you how we reached our current state.

COURSE OBJECTIVES:

By the end of this course, I expect you to:

1. Develop an understanding and appreciation of the Earth's history.
2. Distinguish between historical geology and physical geology.
3. State the age of the earth and discuss how this age is determined.
4. Outline the major geologic events throughout Earth's history.
5. Outline the major evolutionary events throughout Earth's history.
6. Describe and identify basic fossil types.
7. Develop an understanding of the techniques and limitations through which the Earth's history is uncovered.
8. Describe how plate tectonics and the evolution of life are related.
9. Outline some of the major geologic events that have occurred in North America and Nebraska.
10. basic stratigraphic principles to the interpretation of the rock record.

COURSE REQUIREMENTS:

- 1. CLASS PARTICIPATION/ATTENDANCE (worth 20%)** of the course grade. This is determined by the number of times you are present in class and by your contributions during lab work and discussion.
- 2. PROJECTS/PAPERS (worth 30%)** of the course grade. This work will be divided into two projects. One project you will work with a partner on and it will involve the geologic eras. Another project will be worked on individually and will involve the historical geology of Nebraska. Some daily work may be involved.
- 3. TEAM TESTS (worth 50%)** of the course grade. These tests will be worked on with a partner(s) and will involve both lab and chapter questions and