

A: Division: INSTRUCTIONAL DATE: 04 Dec 1999

Department: SCIENCE & TECHNOLOGY New Course: A B: Dept:

Revision of Course
Information form: _____

DATED: _____

GEOLOGY 320	D: <u>Paleontology: Life Through Time</u>	E: <u>4</u>	C: _____
Title & Course No.	Descriptive Title	Semester Credit	Subject

the natural and fossil record. Students will learn how fossils are interpreted. (Enter date & section)

Calendar Description: This course investigates the interpretation of the fossil record.

N. Tavthorne and materials to be submitted to the Assoc. of Geologists
(See Bibliography Page)

Robert J. Carroll (1989). *Biostratigraphy*. 3rd ed. John Wiley

Stearns, Colin W. and Sons, Inc. New York

Complete Form with Entries Under the Following Headings:

- ~~O. Course Objectives;~~
- ~~R. Course Content;~~
- ~~C. Method of Instruction;~~
- ~~R. Course Evaluation~~
- ~~O. Course Objectives;~~

Upon successful completion of this course the student should be able to:

- 1. Use a variety of means to identify and classify a wide variety of fossils.
- 2. Describe the major changes in life through geologic time and the evidence used to support the interpretation of the fossil record.
- 3. Show an understanding of how the principles of biostratigraphy are used to separate and identify environments.
- 4. Show an understanding of the mechanisms of evolution.
- 5. Show an understanding of how fossils can be reconstructed to show a variety of trace fossils and be able to identify a variety of trace fossils.

P. Course content:

1. Definina fos

- a. Fossilization types
- b. Taxonomy, classification, and systematics
- c. Taphonomic theory and examples
- d. Individuals and populations

- a. Precambrian organisms
- b. The rise of animals with hard parts
- c. marine invertebrates of the Paleozoic
- d. Land plants and their origins

Paleozoic vertebrates

Marine Invertebrates of the Mesozoic and Cenozoic

- g. Mesozoic vertebrates
- h. Cenozoic vertebrates
- 3. What we learn from the record
 - a. Biostratigraphy

c. The mechanisms of evolution

d. The record of evolution

Release information construction
f. Paleobiogeography

g. Fossils and sedimentary rocks
h. Trace fossils

Q. Method of instruction:

