

Minnesota State University Moorhead

GEOS 417: Taphonomy and Paleoecology

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:

GEOS 102 - Geology in the National Parks; OR

GEOS 115 - Physical Geology; OR

GEOS 116 - Historical Geology; OR

GEOS 117 - Water, Land, and People

Corequisites: None

MnTC Goals: None

This course will explore the variety of processes that affect the condition and formation of fossils, and the use of this information in the fields of paleontology, paleoecology, and archeology to make interpretations concerning environments and specific processes. Taphonomic processes in both marine and terrestrial environments, and the effects on invertebrate and vertebrate fossils will be addressed. This course will include at least one weekend field trip, and students will be expected to pay a small fee to cover transportation costs.

B. COURSE EFFECTIVE DATES: 01/02/2002 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. What is Taphonomy
2. Necrology
3. Biostratinomy
4. Diagenesis
5. Soils
6. Paleocology

D. LEARNING OUTCOMES (General)

1. Students will gain a better understanding as to how fossils are preserved.
2. Students will have better understand the types of interpretations we can make from fossil deposits.
3. Students will better understand the types of ecological informational that can be interpreted from fossil deposits.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted