Minnesota State University Moorhead

GEOS 315: Sedimentology and Stratigraphy

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:
GEOS 302 - Mineralogy AND GEOS 303 - Petrology; OR
GEOS 115 - Physical Geology

Corequisites: None

MnTC Goals: None

Classification and description of the various kinds of sediments and sedimentary rock units; sedimentary facies; cyclic sedimentation; and techniques of correlating sedimentary rocks. Laboratory exercises will be incorporated into the lecture period. One field trip is required. A special fee will be assessed to those students electing to participate on an optional field trip to cover transportation costs.

B. COURSE EFFECTIVE DATES: 12/28/2001 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Weathering and soils
2. Sediment transport
3. Sedimentary structures
4. Silicicalstic sediments
5. Carbonate sediments
6. Depositional environments
7. Tools of stratigraphy
8. Types of stratigraphy

D. LEARNING OUTCOMES (General)

1. Students will understand how to interpret facies from sedimentary rocks.
2. Students will be able to read and comprehend professional journal articles and understand how to write geological reports.
3. Students will be able to correlate stratigraphic units.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted