# Minnesota State University Moorhead

# **GEOS 301: Archaeological Prospection**

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: ANTH 115 - Introduction to Archaeology AND GEOS 115 - Physical Geology

Corequisites: None

MnTC Goals: None

Examination of geophysical prospecting methods available for archaeological research. Emphasis on the conceptual basis of different prospecting methods and their application in archaeological and geotechnical studies. Hands-on experience with geophysical instruments. Same as ANTH 301

#### B. COURSE EFFECTIVE DATES: 06/03/2002 - Present

#### C. OUTLINE OF MAJOR CONTENT AREAS

- 1. Introduction
- 2. Resistivity
- 3. Magnetometry
- 4. Magnetic Susceptibility
- 5. Electromagnetic Conductivity
- 6. Seismic Refraction, GPR, & Other Methods
- 7. Issues

#### **D. LEARNING OUTCOMES (General)**

- 1. Demonstrate a conceptual understanding of major geophysical methods
- 2. Appreciate in general the prospects and problems of various methods
- 3. Use appropriate strategies and tools to collect, process, and interpret geophysical data
- 4. Understand how geophysical methods are used to explore and manage archaeological properties and in geotechnical research

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

None

#### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted