

# Minnesota State University Moorhead

## GEOS 207: GPS Field Techniques

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course introduces students to Global Positioning System (GPS) data collection techniques commonly used to map point, line, and polygon features in the field. Experience with hand-held GPS units will be complemented by theoretical and background discussions of GPS and techniques for importing and manipulating GPS data in ArcGIS software.

**B. COURSE EFFECTIVE DATES:** 02/27/2014 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. Apply differential corrections to point, line, and polygon features collected by GPS devices.
2. Export point, line, and polygon features from GPS devices to desktop or laptop computers and import the same features into ArcMap for display and/or further processing.
3. Identify different map projections and their appropriate uses.
4. Identify the limitations and strengths of global positioning systems.
5. Record point, line, and polygon features with GPS devices.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted