

# Minnesota State University Moorhead

## BIOL 440: Middle School/Secondary Science Teaching Methods

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Materials and methods appropriate for middle/junior and senior high school science classes and laboratories. Same as CHEM 440 and PHYS 440.

**B. COURSE EFFECTIVE DATES:** 06/01/1995 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Research-based instructional strategies for science teaching
2. Planning for science assessments
3. Creating a safe science classroom
4. Professional development opportunities at the local, state (MNSTA), and national (NSTA) level

### D. LEARNING OUTCOMES (General)

1. Understand how effective science teachers know what to teach (content).
2. Understand how effective science teachers know how to teach (pedagogy).
3. Understand how effective science teachers know their students.
4. Understand how effective science teachers establish a learning environment.
5. Understand how effective science teachers develop as professionals.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted