ED 3410: Secondary Science Methods

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: *.*

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Introduces strategies and materials for teaching science grades 5-12. Discusses the teaching of science through a hands-on, inquiry-oriented methodology, and includes laboratory activities, class discussions, and modification of materials to address current Minnesota state standards. A field experience is required in an appropriate grade level with public school students. Prerequisite: Senior status or consent of instructor.

B. COURSE EFFECTIVE DATES: 05/09/2018 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Course content may include approaches to teaching middle and secondary level science; content topics appropriate to general science and technology; those topics specifically mentioned in relevant MN state standards.

D. LEARNING OUTCOMES (General)

1. Develop inquiry methods, using computer technology and hands-on activities that foster safety in the laboratory and classroom.
2. Examine central ideas in science and process skills toward developing instructional strategies that are aligned to the State and National science education standards for middle and secondary settings.
3. Examine and integrate inquiry methods and authentic performance assessment tools into standards-based science curriculum.
4. Develop strategies of adapting science instruction for diverse student populations.
5. Provide opportunities for field experiences in science.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted