

# Minnesota State University Moorhead

## EECE 426: Primary Methods: Math, Science, Social Studies

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

A methodology course for early childhood majors to explore constructivist approaches to hands-on discovery learning of math, science, and social studies in the primary grades of 1-3.

**B. COURSE EFFECTIVE DATES:** 08/25/2008 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Problem-based, child-centered math instruction
2. Instructional strategies for primary math instruction in number sense, basic facts, base-ten concepts and place value, whole number computation, geometric concepts, measurement, early fraction concepts, algebraic reasoning, data and probability
3. Minnesota Academic Math Standards for primary grades
4. Inquiry-based primary science instruction in air, water, weather and the earth, plants and seeds, animals, animal life cycles and adaptations, body, health, and nutrition, nature of matter and energy, light and sound, simple tools and machines, magnetism, and static electricity
5. Minnesota Academic Standards for primary grades
6. Integrated primary social studies instruction in culture, diversity and values, history, geography, economics, civics and government, and global connections.
7. Minnesota Academic Social Studies Standards

### D. LEARNING OUTCOMES (General)

1. Students will be able to describe key features of developmentally appropriate practice at the primary level and apply these features in their development of lesson plans and teaching.
2. Students will understand the central concepts and methods of inquiry for teaching math, science, and social studies to children in the primary grades.
3. Students will become familiar with content standards in math, science, and social studies for primary grades.
4. Students will understand some of the prominent math, science, and social studies textbooks used in the primary grades and become familiar with the features of the textbooks.
5. Students will be able to write developmentally appropriate lesson plans in math, science, and social studies for primary grades, practice teaching them, and reflect on their teaching.
6. Students will be able to construct, manipulate, and reflect on developmentally appropriate materials that can be used to teach major concepts and ideas in the primary math, science, and social studies.
7. Students will be able to use integrated approach in their planning and teaching of math, science, and social studies lessons.

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

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted