Bemidji State University

MATH 6061: Number Sense For Teachers

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 0
Lab Hours/Week: 0
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

Number sense is the ability to understand numbers, ways of representing numbers, relationships among numbers, and number systems, according to the National Council of Teachers of Mathematics. This course focuses on these issues by examining problems with quantitative information and exploring reasonable solutions. Prerequisite: Teaching license or teaching position or consent of instructor.

B. COURSE EFFECTIVE DATES: 08/21/2017 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Place value
2. Bases other than Base Ten
3. Rational Numbers
4. Prime numbers

D. LEARNING OUTCOMES (General)

1. develop an understanding of the basic concepts, methods, and content of number sense.
2. apply problem solving strategies to look at problems from multiple points of view and judge the appropriateness of various models and techniques in each problem situation.
3. construct logical mathematical arguments in order to communicate problems and solutions effectively both orally and in writing.
4. gain an understanding and appreciation of the structure and beauty of mathematics, the economy and power of its notation and its applications in the world around us.
5. gain knowledge of activities to teach numbers and operations.
6. analyze alternate instructional methods for teaching number concepts.
7. synthesize a unit to develop student number sense in their classrooms.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted