

Minnesota State College Southeast

MATH 0511: Pre-Special Topics Math

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers U.S. Customary Measurements and Metric measurements; real numbers and variable expressions; first degree equations and inequalities; the rectangular coordinate graphing system; and solving literal equations. Related practical application problems will be introduced. This course is developmental and not intended for transfer. (No prerequisites or Accuplacer testing required for entry into course.) (2 credits: 2 lecture/0 lab)

B. COURSE EFFECTIVE DATES: 10/25/2017 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Measurement Systems
2. Real Numbers and Variable Expressions
3. First Degree Equations, Inequalities, and Literal Equations
4. The Rectangular Coordinate Graphing System

D. LEARNING OUTCOMES (General)

1. Evaluate polynomial and rational expressions containing radicals and absolute values at specified points in their domains
2. Represent and solve problems in various contexts using linear functions
3. Make qualitative statements about the rate of change of a function based on its graph or table of values
4. Represent and solve problems in various contexts using exponential functions
5. Represent relationships in various contexts using systems of linear inequalities; solve them graphically. Indicate which parts of the boundary are included in and excluded from the solution set using solid and dotted lines
6. Solve linear programming problems in two variables using graphical methods
7. Solve literal equations
8. Quantities associated with physical measurements must be assigned units, apply units correctly, and convert between measurement systems
9. Sketch graphs of linear functions, and translate between graphs, tables and symbolic representations
10. Use functional notation and evaluate a function at a given point in its domain

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted