

Minnesota State College Southeast

MATH 0522: Pre-College Math (2 cr)

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: *.*

Lab Hours/Week: 2

OJT Hours/Week: *.*

Prerequisites:

This course requires either of these prerequisites

A score of 61 on test Accuplacer Elementary Algebra

A score of 259 on test Accuplacer NG Quantitative Reasoning

Corequisites: None

MnTC Goals: None

This course covers real numbers, variable expressions, general and literal equations, solve and graph linear equations in two variables, graph and evaluate functions, sets, solving and graphing inequalities and solving systems of equations. Related practical application problems are explored. (Prerequisite: Elementary Algebra Accuplacer Score of 61 or higher) (2 credits: 2 lecture/0 lab)

B. COURSE EFFECTIVE DATES: 12/12/2014 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Linear and Exponential Functions
2. Systems of Linear Equations and Inequalities
3. Polynomial Expressions and Equations

D. LEARNING OUTCOMES (General)

1. Sketch linear functions, and translate between graphs, tables, and symbolic representations
2. Find and interpret slope as a constant rate of change using points, graphs, and equations
3. Represent and solve systems of linear equations and inequalities in two variables using a variety of method
4. Develop fluency with simplifying, adding, subtracting, multiplying, and dividing polynomials in multiple variables
5. Factor polynomials using a common monomial factor as well as the grouping method
6. Evaluate a function at a given point in its domain
7. Understand the laws of exponents and scientific notation

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted