

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: MTH 152

Credits: 3

Course Title: Mathematics for the Liberal Arts II

Course Description (including lecture hours, lab hours, total contacts)

Presents topics in functions, combinatorics, probability, statistics and algebraic systems. Lecture 3 hours per week.

General Course Purpose

Covers an assortment of mathematical topics many of which are not taught within the traditional sequence of algebra, geometry, and trigonometry.

Course Prerequisites/Corequisites (*Entry-level competencies **required** for enrollment*)

Prerequisites: placement recommendation for MTH 152 and Algebra I, Algebra II, and Geometry or equivalent.

Course Objectives (Each item should complete the following sentence.)

Upon completing the course, the student will be able to:

- a. Solve linear equations and inequalities and quadratic equations (review topic).
- b. Solve absolute value equations and inequalities (review topic).
- c. Graph functions and solve application problems (review topic).
- d. Solve systems of equations and inequalities (review topic).
- e. Use counting methods to find permutations and combinations.
- f. Solve given probability problems.
- g. Solve statistics problems.
- h. Perform operations with matrices.

Major Topics to be Included

- a. Basic Concepts of Algebra (review topic)
- b. Functions, Graphs, and Systems of Equations and Inequalities (review topic)
- c. Counting Methods
- d. Probability
- e. Statistics
- f. Matrices

Effective Date of Course Content Summary (Month, Date Year): February, 2009