

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: MTH 50

Credits: 1-2

Course Title: Mathematics for Teacher Entrance Exams

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

Provides participants with review and practice for the mathematics portion of the licensure examination required of all beginning teachers in Virginia. Test-taking strategies are emphasized throughout. Lecture 1-2 hours per week.

General Course Purpose

The purpose of this course is to help the student identify personal strengths and weaknesses in skills included on the mathematics portion of the teacher licensure examination and show improvement in test-taking strategies and mathematics problem solving.

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

Prerequisite: MTH 2 or equivalent

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

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

- a. Use various sets of numbers, their equivalent forms, and their properties, such as integers, fractions, decimals, and percents
- b. Determine probabilities of dependent and independent events
- c. Apply concepts of statistics, such as mean, median, mode, and range
- d. Interpret tables, graphs and other representations of data
- e. Use ratios and proportions to solve problems
- f. Identify mathematical patterns
- g. Apply the concepts of algebra, such as variables, expressions, equations, and formulas
- h. Use principles of geometry, including plane figures and coordinate geometry
- i. Measure length, area, volume, capacity, time and temperature using various units

Major Topics to be Included

- a. The Teacher Licensure Examination for Virginia
- b. Test-taking Strategies and Problem-Solving
- c. Overview of Mathematical Topics:
- d. Number Sense and Numeration
- e. Real Number Systems
- f. Ratio, Proportion, and Percent
- g. Probability and Simple Statistics
- h. Introduction to Algebra
- i. Introduction to Geometry
- j. Measurement

Effective Date of Course Content Summary (Month, Date Year): Fall 2007