Common Core Mathematics II
Syllabus

Course Number: MA2006

Grade level: 9–12

Prerequisite Courses: Common Core Math I

Credits: 1.0

Course Description

This course begins with a brief exploration of radicals and polynomials before delving into quadratic expressions, equations, and functions, including a derivation of the quadratic formula. Students then embark on a deep study of the applications of probability and develop advanced reasoning skills with a study of similarity, congruence, and proofs of mathematical theorems. Students explore right triangles with an introduction to right triangle trigonometry before turning their attention into the geometry of circles and making informal arguments to derive formulas for the volumes of various solids.

Course Objectives

Throughout the course, you will meet the following goals:

- Demonstrate an understanding of functions and use functions to describe quantitative relationships
- Communicate effectively using graphic, numeric, symbolic, and verbal representations
- Students will solve geometric problems relating to triangles, circles, and solids
- Demonstrate an understanding of the relationship between real and non-real numbers
- Study the theory and application of probability.
- Solve and graph quadratic expressions and functions

Student Expectations

This course requires the same level of commitment from you as a traditional classroom course would. Throughout the course, you are expected to spend approximately 5–7 hours per week online on the following activities:

- Interactive lessons that include a mixture of instructional videos and tasks
- Assignments in which you apply and extend learning in each lesson

- Assessments, including quizzes, tests, and cumulative exams

Communication

Your teacher will communicate with you regularly through discussions, email, chat, and system announcements. You will also communicate with classmates, either via online tools or face to face, as you collaborate on projects, ask and answer questions in your peer group, and develop your speaking and listening skills.

Grading Policy

You will be graded on the work you do online and the work you submit electronically to your teacher. The weighting for each category of graded activity is listed below.

Grading Category	Weight
Lesson Quizzes	30%
Unit Tests	30%
Cumulative Exams	20%
Assignments	20%

Scope and Sequence

When you log into Edgenuity, you can view the entire course map—an interactive scope and sequence of all topics you will study. The units of study are summarized below:

Unit 1: Extending the Number System
Unit 2: Quadratic Functions and Modeling
Unit 3: Expressions and Equations
Unit 4: Applications of Probability
Unit 5: Similarity, Right Triangle Trigonometry, and Proofs
Unit 6: Circles With and Without Coordinates

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