Mathematics I
Course Overview and Syllabus

Grade level: 9–12

Prerequisite Courses: Pre-Algebra   **Credits:** 1.0

Course Description

This course formalizes and extends middle-school mathematics, deepening students' understanding of linear relationships. The course begins with a review of relationships between quantities, building from unit conversion to a study of expressions, equations, and inequalities. Students contrast linear and exponential relationships, including a study of sequences, as well as applications such as growth and decay. Students review one-, two-, and multi-step equations, formally reasoning about each step using properties of equality. Students extend this reasoning to systems of linear equations. Students use descriptive statistics to analyze data before turning their attention to transformations and congruency theorems. Equations and figures in the coordinate plane assist in connecting Algebra and Geometry through coordinates.   The structure and content of this course naturally guides students to experience mathematics as a rational, beneficial subject which challenges students to critically think through problem situations.

Course Objectives

Throughout the course, you will meet the following goals:

- Analyze and interpret the structure of expressions and write expressions in equivalent forms to solve problems
- Communicate effectively using graphic, numeric, symbolic, and verbal representations
- Recognize the graph of given data as being linear or exponential
- Solve equations and inequalities in one variable and represent and solve equations and inequalities graphically
- Create and solve equations that describe numbers or relationships
- Model and solve problems with linear systems graphically

The course objectives are implemented throughout specific lessons, focusing on applying theorems and properties, using mathematical reasoning to construct arguments and solving real world and mathematical problems.

The lesson objectives are assessed through assignments, quizzes, unit tests, performance tasks and cumulative exams.

✖Edgenuity™

Student Expectations

This course requires the same level of commitment from you as a traditional classroom course. Students are expected to spend approximately five to seven hours per week online on:

- 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, e-mail, chat, and system announcements, and will provide you with hours of availability, contact policies, and any synchronous attendance requirements. 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	20%
Unit Tests	30%
Cumulative Exams	20%
Assignments	20%
Projects	10%

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: Relationships Between Quantities

Unit 2: Linear and Exponential Relationships: Part One

Unit 3: Linear and Exponential Relationships: Part Two

Unit 4: Linear and Exponential Relationships: Part Three

Unit 5: Reasoning with Equations: Part One

Unit 6: Reasoning with Equations: Part Two

Unit 7: Descriptive Statistics

Standards Alignment

The course was designed to meet the requirements of the 2016 Oklahoma Academic Standards for Mathematics. The standards aligned to each lesson are available in the student portal in the lesson information panel.

Materials and Technology Requirements

All course materials are provided through the student portal. You will become familiar with them through an orientation video and the student handbook. These resources are available within the Student Organizer, where you can also check the status of your operating system, processor speed, plug-ins and connection speed.

Accessibility

The course is designed for accessibility to all students. The system provides features and accommodations to meet the needs of ELL and students with IEP's, 504 plans, and Section 508. These accommodations include addressing multiple learning styles, accommodations for assessments, video caption/transcripts, read-aloud and translation tools, and many other features/accommodations.