

## Geometry Foundations

### **COURSE DESCRIPTION:**

This is comprehensive course featuring geometric terms and processes, logic and problem solving. The course includes topics such as parallel line and planes, congruent triangles, inequalities and quadrilaterals. Various forms of proof are studied. Emphasis is placed upon reasoning and problem solving skills gained through study of similarity, areas, volume, circles, and coordinate geometry.

The course content has been appropriately chunked into smaller topics to increase retention and expand opportunities for assessment. With each topic, quizzes are presented to the student. Audio readings are included with every portion of content, allowing auditory learners the opportunity to engage with the course. Test pools and randomized test questions are utilized in quizzes as well as unit exams, ensuring that students taking the course will not be presented with the same exams. Additionally, the course includes additional practice activities (such as cloze activities), as well as pre-topic vocabulary lists, that introduce key vocabulary in English and in Spanish.

**PREREQUISITES:** Algebra I

**COURSE LENGTH:** Two semesters

**REQUIRED SOFTWARE:** None

### **COURSE OUTLINE:**

#### **Semester 1**

- The Language of Geometry
- Reasoning and Introduction to Proof
- Parallels
- Congruent Triangles
- Applying Congruent Triangles

#### **Semester 2**

- Quadrilaterals
- Similarity
- Right Triangles and Trigonometry
- Circles
- Polygons and Area