

# **GEOMETRY**

## **TEXT**

Geometry: Concepts and Applications

Geometry, new edition

## **PREREQUISITES**

Algebra I

## **OBJECTIVES**

- Understand the basic concepts of formal deductive logic and geometry and apply them in problem solving
- Apply formal reasoning in the understanding of the geometric and algebraic relationships found in two-dimensional (planar) and three-dimensional (spatial) forms

## **CONTENT**

- The Pythagorean Theorem
- Perimeter and area
- Properties of parallel lines
- Congruent triangles
- Length, area, and volume relationships
- Polygons
- Circles
- Surface area and volume
- Geometric proofs
- Development of deductive logic

## **SKILLS**

- Deductive reasoning
- Note taking
- Notebook organization/maintenance
- Application of relevant formulas
- Step- by step mathematical process
- Visual/Spatial reasoning

## **METHODS**

Lecture and class discussion with an emphasis on note taking. Demonstration of learning and understanding of concepts will be through successful completion of tests, quizzes and problem solving. Most of each class period is set aside for individual instruction and working on assigned study and problems with formal peer tutoring.

## **HOMEWORK**

Students are responsible for completing assignments that cannot be completed in class as homework.

## **GRADING/CREDITS**

Grades are based on tests (40%) quizzes (25%) daily assignments (25%) and participation (10%). Credit will be earned according to the number of quizzes, reviews, and tests passed.

## **INDIVIDUALIZATION**

As much individual instruction as possible will be given to students, both in and outside of the classroom, to meet student needs. Contractual arrangements with teacher are negotiable and always include demonstration of individual mastery of material.

## **ABSENCES/TARDIES**

Students are responsible for all assignments, quizzes or tests including those given when they are absent or tardy.