

Rationale

The need to understand and be able to use mathematics in everyday life and in the workplace has never been greater and will continue to increase. The underpinnings of everyday life are increasingly mathematical and technological. Just as the level of mathematics needed for intelligent citizenship has increased, so too has the level of mathematical thinking and problem solving needed in the workplace. Those who understand and can do mathematics will have significantly enhanced the opportunities and options for shaping their futures. Mathematical competence opens doors to productive futures.

Course Description

Geometry is the study of logical reasoning, which is used to draw conclusions dealing with geometric shapes and their interrelationships. This course will apply arithmetic practices to the study of basic geometric concepts, while preparing the student to use geometric calculations in their everyday life.

Note: Pre-Geometry may not be taken after successful completion of Principles of Algebra 1A/Principles of Algebra 1B. Calculators will be used when appropriate.

Prerequisites

Prerequisites: Pre-Algebra

Open to: 10, 11, 12

Credit: 1 Unit - Two Semesters (Math)

Course Objectives

1. The student will apply appropriate technology and verbally communicate mathematically with 80% accuracy. Locally assessed. (CLE: MA 3; 1.4, 1.5, 18, 2.7)(A+: Speaking)
2. The student will research and apply properties of two- and three- dimensional figures with 80% accuracy. Locally assessed. (CLE: MA, Geometry, Geometric and Spatial Relationships, 3C; MA, Algebra 1, Geometric and Spatial Relationships, 1B) (MA 2: 1.10, 3.3) (A+: Research)
3. The student will classify figures in terms of congruence and similarity and apply these relationships in written form with 80% accuracy. Locally assessed. (CLE; MA, Measurement, 2B, 2C; Algebra 1, Geometric and Spatial Relationships, 1B.) (MA 2; 3.5, 1.10) (A+: Writing)
4. The student will reason mathematically and read other students' solutions to determine the validity of those solutions with 80% accuracy. Locally assessed. (CLE; MA, Geometry, Geometric and Spatial Relationships, 1A) (MA 2; 3.5) (A+: Reading)
5. The student will use basic arithmetic concepts to relate and apply the characteristics of geometric shapes and spatial relationships to real life with 80% accuracy. Locally assessed. (CLE: MA, Algebra 1, Number and Operations, 1A, 1B, 1C, 2D) (MA 2; 3.3)

BOE 11-6-14