

**COURSE TITLE:** GEOMETRY COMPUTER VISUALIZATION/SIMULATION (Geometry CVS)

Level of Difficulty	Estimated Homework	Prerequisites
Moderate	0-30 Minutes	<b>District:</b> C or higher in Algebra 1CP or Algebra 1A/1B <b>Department Suggestion:</b> C or higher in Algebra 1CP or Algebra 1A/1B

**Course Description:**

This course covers the topics of Geometry using an exploratory and project based approach that employs both investigations with current technologies and creating new technologies via computer programming. Mathematical concepts covered are concepts of Euclidean geometry including definitions, postulates, and theorems with a focus on angles, parallel lines, congruent and similar triangles, polygons, circles and arcs, the Pythagorean Theorem, introductory trigonometry, solids, and constructions. The course will focus on the visual representation of Geometry using computer graphics and animations. A small amount of programming will be taught (no prior computer experience required). The course is focused on concrete, hands on projects instead of traditional abstract math topics. This course is a preparation for Algebra 2 for the 21<sup>st</sup> Century or for Data Science math class. This course prepares students for Algebra 2 for the 21st Century or for Data Science CP but not for Algebra 2 CP.

**Supplemental Information:**

Meets UC/CSU "c" requirement