

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

Level of Difficulty	Estimated Homework	Prerequisites
Moderate.	0-30 min	<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, and solids. The course will focus on the visual representation of Geometry using Desmos for computer graphics and animations. The students will also be using an online learning platform of DeltaMath for immediate feedback on lessons. A small amount of programming will be taught (no prior computer experience required). The course is focused on concrete, hands-on learning instead of traditional abstract math topics. This course prepares students for Algebra 2 for the 21st Century but not for Algebra 2 CP.

**Grading:**

Notes can be used on tests and tests can be retaken

**Syllabus:**

<https://docs.google.com/document/d/1OS4gzc7U2rsao-SNe4nsENyCIGUT83fxQ7pXNLMQKcY/edit?usp=sharing>

**Supplemental Information:**

Meets UC/CSU "c" requirement