Geometry
2020

Course Description:
Geometry is a required CCR course that covers the traditional geometric content with an introduction to geometric proof. The emphasis of the course is on geometric relationships of figures, visualization of geometric properties, and measurement. The course also integrates previously taught algebraic skills through application to geometric concepts.

Big Ideas:
1. Visualization can help you connect properties of real objects with two-dimensional drawings of these objects.
2. Some attributes of geometric figures, such as lengths, areas, volume, and angle measure, are measureable. Units are used to describe these attributes.
3. Two geometric figures are similar when corresponding lengths are proportional and corresponding angles are congruent.
4. Areas of similar figures are proportional to the squares of their corresponding lengths.
5. Volumes of similar figures are proportional to the cubes of their corresponding lengths.

Essential Learner Outcomes:

ELO #	Essential Learner Outcome Description	Standards
1	Make geometric constructions.	G.CO.D
2	Use coordinates to prove geometric theorems algebraically.	G.GPE.B
3	Apply geometric concepts in modeling situations.	G.MG.A
4	Understand congruence in terms of rigid motions.	G.CO.B
5	Prove geometric theorems.	G.CO.C
6	Prove theorems using similarity.	G.SRT.B
7	Define trigonometric ratios, and solve problems involving right triangles.	G.SRT.C
8	Understand similarity in terms of similarity transformations.	G.SRT.A
9	Experiment with transformations in the plane.	G.CO.A
10	Explain volume formulas and use them to solve problems.	G.GMD.A
11	Visualize relationships between two-dimensional and three-dimensional objects.	G.GMD.B
12	Understand and apply theorems about circles.	G.C.A
13	Find arc lengths and areas of sectors of circles.	G.C.B

14	Translate between the geometric description and the equation for a conic section.	G.GPE.A
15	Understand independence and conditional probability and use them to interpret data.	G.CP.A