

COMPONENT 1: GEOMETRY
& THE ACCOMPANYING/OPTIONAL/SUGGESTED
UNITS OF STUDY

Suggestion: 5-10 Units or more per Course

CURRICULUM MAP CONTRIBUTORS/AUTHORS:
Cope, Dykstra, Feick, Galilei, Hough, Korona, Smith, Wilson

DEPARTMENT:
Math

NAME OF COURSE: GEOMETRY

GRADE: HS

COURSE DESCRIPTION:

Students will develop reasoning and problem solving skills by studying topics as congruence and similarity, and apply properties of lines, triangles, quadrilaterals and circles. Students will also develop problem solving skills by using length, perimeter, area circumference, surface area, and volume to solve real-world problems. In addition to the geometry content, students will solve numerous examples of exercises involving algebra, data analysis and probability.

#	NAME OF UNIT/MODULE	UNIT/MODULE DESCRIPTION/OVERVIEW:
1.	ESSENTIALS OF GEOMETRY	Overview of points, lines, planes and angles, including polygons.
	List PA Core Standard(s) for this UNIT/MODULE	A3, A11, A14
2.	PARALLEL & PERPENDICULAR LINES	Writing/Graphing Linear Equations including parallel and perpendicular lines.
	List PA Core Standard(s) for this UNIT/MODULE	C1, A3, A11, A14
3.	MEASUREMENT	Perimeter, Area, Surface Area, Volume of 2 and 3 dimensional figures.

	List PA Core Standard(s) for this UNIT/MODULE	A3, A11, A12, A13, A14
4.	CONGRUENT TRIANGLES	Prove triangles congruent by various methods.
	List PA Core Standard(s) for this UNIT/MODULE	A1, A2, A3, A4, A11, A14
5.	RELATIONSHIPS WITHIN TRIANGLES	Explore relationships between perpendicular bisectors, angle bisectors, medians and altitudes of triangles.
	List PA Core Standard(s) for this UNIT/MODULE	A3, A11, A14
6.	SIMILARITY	Use properties of similar polygons.
	List PA Core Standard(s) for this UNIT/MODULE	A1, A3, A5, A6, A11, A14,
7.	RIGHT TRIANGLES & TRIGONOMETRY	Use the Pythagorean Theorem, and the Trig ratios to solve problems.
	List PA Core Standard(s) for this UNIT/MODULE	C7, C8, C9, A3, A7, A11, A14
8.	PROPERTIES OF CIRCLES	Investigate properties of circles.

	List PA Core Standard(s) for this UNIT/MODULE	C1, C9, A3, A8, A11, A14
9.	ARC LENGTH/AREA OF SECTOR/GEOMETRIC PROBABILITY	Find arc length of a circle, area of a sector of a circle and probability of geometric events.
	List PA Core Standard(s) for this UNIT/MODULE	A3, A9, A14, B6, B7
10.	QUADRILATERALS	Study the properties of various quadrilaterals.
	List PA Core Standard(s) for this UNIT/MODULE	A3