Course Name: Geometry	
Department: Math	Grade Level(s): 10-12
Duration/Credits: 1 year/1.0 credit	Prerequisites: Any Algebra II Course
BOE Approval Date:	Course Code: 2195

Course Description:
The Geometry student will think critically to analyze situations involving geometric figures. Analyzing the situations will require perseverance in order to discover these geometric relationships and apply logical reasoning to draw valid conclusions. The student will evaluate the reasonableness of their findings and produce logical arguments to support their conclusion.

Course Rationale:
The demand for critical thinkers with the ability to communicate their ideas continues to increase. More specifically, the student that can model situations involving mathematics and explain their findings are in demand. The ability to analyze situations produces significant enhanced the opportunities and options for shaping their futures. Mathematical competence opens doors to productive futures.

Course Objectives:
1. The student will experiment with transformations to understand congruence and similarity. 2. The student will produce valid written arguments of various forms to prove geometric theorems. (A+ Writing) 3. The student will make geometric constructions. 4. The student will define trigonometric ratios and solve problems involving right triangles. 5. The student will understand and apply theorems about circles, including deriving how to find the measure of an arc or sector of a circle. 6. The student will translate between the geometric description and the equation for a conic section. 7. The student will research and visualize relationships between 2D and 3D objects.   (A+ Research) 8. The student will apply geometric concepts in modeling situations and review the rationale of others. (A+ Reading) 9. The student will understand independent and conditional probability and use them to interpret data and verbally defend their rationale. (A+ Speaking and Listening)