GEOMETRY

Requirement area: Math or Elective
Course code: MGE212
Grade Level: 9, 10, 11, 12
Prerequisite: Completion of Algebra I
Length: Year long (1.0 credit)
Homework: 1 to 3 hours per week
Designator: NCAA

Description  Topics include: Deductive and inductive reasoning, analyzing mathematical rules using algebraic proofs, proving geometric theorems involving parallel and perpendicular lines and congruent angles. Students also explore properties of triangles, proving triangle congruence and similarity and the Pythagorean Theorem. Students use properties of polygons to classify, find perimeter and area, and to prove theorems regarding special parallelograms. Similarity and congruence of two and three-dimensional figures, transformational geometry, right triangle geometry and trigonometry are also taught.