

Great Plains Lutheran  
Geometry  
2010-2011

Course Length: One year

Mr. Roloff

Credit: 1 Unit

Grade Levels: varies

Required

Textbook "2010 Glencoe Geometry"

Materials: TI 84 Calculator or TI Inspire  
Compass, Protractor, Straight Edge  
Notebook, Pencil

### Course Description

Geometry is more than just simply studying lines, shapes and points. Geometry is looking at the world around us and being able to describe, analyze, and see the beauty of its structures. Geometric thinking and skills are useful in other areas of math as well as many other areas of life. We will be connecting what we have learned in algebra to the physical world and learning to make logical well supported conclusions from what we know.

### Objectives:

1. Use deductive and inductive reasoning to recognize and apply properties of geometric figures.
  - a. Apply properties of triangles and quadrilaterals to find unknown parts G.1.1
  - b. Apply relationships among triangles G1.2
  - c. Justify properties of geometric figures (Proofs) G1.1A
  - d. Apply properties associated with circles G1.3
  - e. Apply properties of right Triangles G1.2A
2. Use properties of geometric figures to solve problems
  - a. Use two-dimensional representations of three-dimensional figures G2.1
  - b. Use a coordinate grid to apply geometric properties G2.2
  - c. Use proportions to work with geometric figures G2.3

### Class Procedures:

We will use lecture, demonstration, and group work. Most lectures will be teacher directed but students will be asked to demonstrate their work to the class.

It is important that you have all work done and all the needed materials for each class. You will need your textbook, notes and other materials listed unless instructed otherwise. Any work not ready at the assigned time will be docked one grade.

**Course Evaluation:**

**Class work:** This includes home work and work which is done in class. This work is 10% of your quarter grade. It is also an important tool to prepare for quizzes and test.

**Quizzes:** There will be several quizzes each quarter. Quizzes are weighted approximately 1.5 times daily work.

**Test:** Test will account for two times what daily work does towards your grade. There will not be as many tests so it is important to prepare for, study for, and ask questions before each test.

**Semester Grade:** 40% each quarter, 20% semester exam

**Class Expectations**

- Come ready for class
- Be respectful of others
- Be willing to work and participate
- Be willing to ask for help

God's Blessings on your studies