**Geometry Syllabus  
Spring 2016**

**Course Overview**

Topics for Geometry will include:

* Constructing geometric figures using a straight edge and ruler
* Proving statements and theorems
* Parallel and perpendicular lines
* Congruence of triangles
* Midsegments of triangles
* Polygons and circles
* Similarity of polygons
* Right triangle trigonometry
* Area, perimeter, and volume

The material will follow up and expand upon knowledge from algebra 1. It is expected that students have proficiently passed algebra 1.

The book for Math 300 is Geometry by Charles, Hall, Kennedy, et al. produced by Pearson. This book will rarely be required in class (you will be informed if you will need it in advance), but is necessary for homework and other practice.

Students are *required* to bring a graphing calculator to class daily. Recommended calculators include the TI-83, TI-84 (any edition), or the TI-nSpire (with an 84 keypad). Although we will learn the formulas to compute information by hand, the calculations for this class are time consuming and a calculator will allow us to get a better understanding of the topics without getting stuck on the more trivial arithmetic.

Access to a computer to work with the free program Geogebra is also recommended as it will be useful for visualizing geometric figures and concepts.

**Teaching Methods**

Students will often be asked to explain their reasoning in solving problems. This could be verbally or written in sentence form. Proper vocabulary and understanding of concepts are stressed in these explanations.

Lecture notes will drive much of the course. There will also be some inquiry learning where curious students will be asked to discover some new paths for solutions.

**Student Evaluation**

A student’s grade will be determined by total points. All of the grade will come from quizzes and tests. Although homework is not graded, it is *essential* for understanding and success in the course.

Typically, each question on a quiz or test will be graded on a scale of 1 to 5. A majority of credit will be given to understanding the concept, but a score of 5 will require the student to make no mistakes.

Calculators will often be required on quizzes and tests, so every effort should be made to bring one on these days.

Refer to the Retake Policy informational sheet for more information.

**Materials Needed**

Students will need:

* Notebook for writing information
* Writing utensils
* TI-83 or TI-84 calculator
* An essential reading book to be announced in class