



ISS Course Syllabus

Teacher: **Mr. Marcus**
Course Title: **Geometry**

Grade: **9 & 10**
HS Credit Value:

Course Objectives:

Each level listed on the under fold is an integral part of a complete and comprehensive Course in **Geometry**.

While each section has a specific theme, the students will continuously review and integrate previously mastered concepts.

This gives the students an opportunity to develop self-confidence while broadening their scope of appreciation for **Geometry** and its applied applications.

The Course Sequence is specially structured so that each month has a specific objective. Once these objectives are met and mastered, the students will be able to apply these acquired skills to problem solving in a wide range of applications.

General Course Contents:

Throughout this course sequence, the students will learn the following concepts and their applications.

<p>A Mathematical System</p> <ul style="list-style-type: none">. Point, lines, and planes. Definition. Geometric terms. Postulates and theorems
<p>Proofs</p> <ul style="list-style-type: none">. Logic. Reasoning. Two column proof. Paragraph proof
<p>Congruency</p> <ul style="list-style-type: none">. Congruent triangles. Corresponding parts. Inequalities. Quadrilaterals
<p>Similar Polygons</p> <ul style="list-style-type: none">. Ratio and proportions. Definition and similarity. Similar polygons & triangles. Right triangle geometry
<p>Similar Polygon</p> <ul style="list-style-type: none">. Ratio & proportions. Definitions & similarity. Similar polygons & triangles. Right angle geometry

Circles

- . Circles and spheres
- . Tangents, arcs and chords
- . Special angles in circles
- . Special segments in circles

Construction & Locus

- . Basic constructions
- . Triangles and circles
- . Polygons
- . Locus meaning and use

Area & Volumes

- . Area of polygons
- . Area of circles
- . Surface areas of solids
- . Volume of solids

Coordinate Geometry

- . Ordered pairs
- . Distance
- . Lines
- . Coordinate proofs

Review

- . Proof and angles
- . Polygons and circles
- . Construction and measurement
- . Coordinate geometry

Evaluation System:

- The students will be given formal end of term examinations.
- The students will be informally assessed in the following ways:
 - a. Weekly or by unit, informal teacher generated tests.
 - b. Daily, this includes class work, participation, and behavior.
 - c. Homework assignments

Examination	30%
Graded Class Work	25%
Home work	20%
Participation	15%
Behavior	10%
Total	100%

Strategies and Instructional Methods

- Demonstrations
- Direct problem solving
- Note taking
- Review and practice
- Weekly quizzes

Resources/ Textbooks:

Geometry; Prentice Hall Mathematics