**Geometry Syllabus Spring 2014**

Credits: 1 credit in Mathematics

Teacher: Dr. Valluru

Contact: svalluru@marlboro.k12.sc.us, 843-479-5900

Website: drvalluru.weebly.com

Planning Time: 4th block: 1:45 P.M. – 3:15 P.M.

Course Duration: 18 weeks

**Course Overview aligned to Common Core Standards:**

**Congruence**

* Experiment with transformations in the plane
* Understand congruence in terms of rigid motions
* Prove geometric theorems
* Make geometric constructions

**Similarity, Right Triangles, and Trigonometry**

* Understand similarity in terms of similarity transformations
* Prove theorems involving similarity
* Define trigonometric ratios and solve problems involving right triangles
* Apply trigonometry to general triangles

**Circles**

* Understand and apply theorems about circles
* Find arc lengths and areas of sectors of circles

**Expressing Geometric Properties with Equations**

* Translate between the geometric description and the equation for a conic section
* Use coordinates to prove simple geometric theorems algebraically

**Geometric Measurement and Dimension**

* Explain volume formulas and use them to solve problems
* Visualize relationships between two-dimensional and three-dimensional objects

**Modeling with Geometry**

* Apply geometric concepts in modeling situations

**Readings:**

1. *Prentice Hall Geometry:* Randall I. Charles, Basia Hall, Dan Kennedy et.al
2. *Holt Geometry:* Edward B. Burger et.al
3. *Introduction to Geometry - The Art of Problem Solving:* Richard Rusezyk

**Technology/Software:**

Mimio Electronic Board, Interwrite Board, Virtual TI-84 Graphing Calculator, **DiscoveryEducation.com**, MCHS Website

**Materials needed:**

One 3 ring binder, 200 college/wide ruled papers, 50 graph sheets, compass, protractor, 1 ruler, 5 white regular size posters, 20 construction papers, 50 index cards, and 1 box of crayons

**Grading Rubrics:**

Tests 35%

Classwork 30%

Activities, projects, quizzes 30%

Homework 5%

**Classroom routines/expectations:**

1. Students must write down the standards and objectives in the notebook within the first two minutes.
2. Teacher will review the previous lesson in the first ten minutes. Students must respond to the teacher’s questions.
3. Students must be highly engaged in classroom learning at all times.
4. Students must participate in classroom discussions and cooperative learning.
5. **Every day, classroom participation grade will be given.**
6. If students miss the class, they must attend after school program to make up the missed work.
7. **The students who skipped/unexcused absence to the class cannot make up their work. They will receive a zero for that assignment.**
8. **Follow all MCHS discipline policies.**

**GRADING RULES:**

**Testing:**

* **If students communicate with anyone when the testing is in progress, the test score is zero.**

**Classwork: Daily grade will start with 100 points.**

* **If students do not copy standards and objectives within the first two minutes, then they lose 20 points.**
* **If the students do not bring textbooks to class, they lose 20 points.**
* **If students do not respond to the teacher’s questions, they lose 20 points.**
* **If students do not pay attention when the teaching is going on, they lose 30 points.**
* **If students do not engage with problem sets, they lose 30 points.**

**Activities, projects, quizzes:**

* **Students must follow the guidelines and rubrics in order to accomplish their activities, projects, and quizzes.**

**Homework:**

* **No late work is accepted. A grade of zero is given.**

**Please read the complete document and have a copy of this. This is also found in MCHS website. Thank you.**

Signature of the student: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of the parent: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_