COURSE: **Mathematics II**

INSTRUCTOR: Andy Miller – email: andy.miller@gcssk12.net

PREREQUISITE: Completion of Math I and Math II

**Grading Policy:**

Final grade: 45% Major Grades, 35% Daily, 20% EOCT

 Daily work: Quizzes will be given regularly and will count as a daily grade

 Major Grades: An End-of-Course-Test will be given at the end of this semester

**SCHOOLWIDE RULES**:

1. **RESPECT for the teacher , other students, and school property**
2. **RESTRAINT and Self –Control**
3. **RESPONSIBILITY for your own behavior**

**All Policies and Regulations set forth in the Student Handbook must be obeyed including**

 **ID’s must be worn during school day at all times**

 **Cell phones/electronic devices are NOT permitted during class time**

 **NO hats are permitted to be worn in the school building**

Discipline Consequences:

1. Warning
2. Parental Contact
3. Referral to your Principal in charge of Discipline

**Course Description:**

 This is the second course in a sequence of courses designed to provide students with a rigorous program of study in mathematics. It includes complex numbers; quadratic, piecewise, and exponential functions; right triangles, and right triangular trigonometry; properties of circles; and statistical inference.

**COURSE OUTLINE ( including Georgia Performance Standards Covered)**

**NUMBER AND OPERATIONS**

**MM2N1. Students will represent and operate with complex numbers.**

**ALGEBRA**

**MM2A1. Students will investigate step and piecewise functions, including greatest**

**integer and absolute value functions.**

**MM2A2. Students will explore exponential functions.**

**MM2A3. Students will analyze quadratic functions in the forms *f*(*x*) = *ax*2+ *bx* + *c***

**and *f*(*x*) = *a*(*x* – *h*)2+ *k*.**

**MM2A4. Students will solve quadratic equations and inequalities in one variable.**

**MM2A5. Students will explore inverses of functions.**

**GEOMETRY**

**MM2G1. Students will identify and use special right triangles.**

**MM2G2. Students will define and apply sine, cosine, and tangent ratios to right**

**triangles.**

**MM2G3. Students will understand the properties of circles.**

**MM2G4. Students will find and compare the measures of spheres.**

**DATA ANALYSIS AND PROBABILITY**

**MM2D1. Using sample data, students will make informal inferences about**

**population means and standard deviations.**

**MM2D2. Students will determine an algebraic model to quantify the association**

**between two quantitative variables.**

It is mandatory that the math I or math II EOCT is passed. Otherwise, a Georgia High School Graduation Test (GHSGT) for that content area must be taken and passed.

**Required Materials:**

1. Pen or Pencil; sharpened prior to class or mechanical pencil with lead
2. Paper
3. Calculator
4. A math notebook is highly recommended

**Classroom Rules**

1. **Do Not Talk** when I am talking!
2. **Be Prepared.** Be in your seat with your materials prepared when the bell rings.
3. **Be Enthusiastic.** Questions on topic are expected. Make sure that you are listening to another student’s question – it may be the same as yours.

###### Signatures: Parents: Please sign below to indicate that you have read and understand all of the information in this syllabus. If you have any questions or concerns please email or call me and I will respond as soon as possible.

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 Student Signature Date

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 Parent Signature Date