***Ms. K. Morgan,* Teacher**

Email address: morgaka@boe.richmond.k12.ga.us

**Course Description and Goals:**

Algebra: Concepts and Connections is the first course in a sequence of three high school courses designed to ensure career and college readiness. Students will apply their algebraic and geometric reasoning skills to make sense of problems involving algebra, geometry, bivariate data, and statistics. This course focuses on algebraic, quantitative, geometric, graphical, and statistical reasoning. In this course, students will continue to enhance their algebraic reasoning skills when analyzing and applying a deep understanding of linear functions, sums and products of rational and irrational numbers, systems of linear inequalities, distance, midpoint, slope, area, perimeter, nonlinear equations and functions, quadratic expressions, equations and functions, exponential expressions, equations, and functions, and statistical reasoning. High school course content standards are listed by big ideas including Data and Statistical Reasoning, Probabilistic Reasoning, Functional and Graphical Reasoning, Patterning and Algebraic Reasoning, and Geometric and Spatial Reasoning.

**Course Outline:** Algebra Concepts and Connections is divided into several different units.

Unit 0: Think Like a Mathematician 4 days

Unit 1: Modeling Linear Functions 20 days

Assessment Enrichment Remediation /Pre-Unit Review Buffer Unit 1 3 days

Unit 2: Analyzing Linear Inequalities 9 days

Assessment Enrichment Remediation /Pre-Unit Review Buffer Unit 2 3 days

Unit 3: Investigating Rational and Irrational Numbers 10 days

Assessment Enrichment Remediation /Pre-Unit Review Buffer Unit 3 3 days

Unit 4: Modeling and Analyzing Quadratic Functions 33 days

Assessment Enrichment Remediation /Pre-Unit Review Buffer Unit 4 3 days

Unit 5: Modeling and Analyzing Exponential Expressions & Equations 10 days

Assessment Enrichment Remediation /Pre-Unit Review Buffer Unit 5 3 days

Unit 6: Analyzing Exponential Functions 20 days

Assessment Enrichment Remediation/Pre-Unit Review Buffer Unit 6 3 days

Unit 7: Investigating Data 12 days

Assessment Enrichment Remediation/Pre-Unit Review Buffer Unit 7 3 days

Unit 8: Algebraic Connections to Geometric Concepts 10 days

Assessment Enrichment Remediation/Pre-Unit Review Buffer Unit 8 2 days

Culminating Capstone Unit 25 days

**Materials**: You will need a **school laptop**, three-ring notebook, notebook paper, pencil/pen, and composition notebook.

**Assignments and Absences**

Students will receive a variety of assignments designed to enhance their learning. If a student is absent, the student is responsible for the missed assignment. Students who have an excused absence will be allowed five days to turn in the missed assignment, but the teacher will determine if additional time is needed on a case by case basis. **It is the student’s responsibility to contact me if they are having trouble or need assistance.**

**Course Assessment Plan/Grading Scale:** This course will include many formative assessments (bell work, quizzes, and classwork). The course will also include four countywide common assessments. At the conclusion of the course, in late April all Algebra Connections and Concepts students are required to take the Georgia Milestones Assessment which will count as 10% of their final grade. For this course grades will be assigned as follows:

**Major Assignments – 40% (Unit Common Assessment, Delta Math Virtual Quiz and Projects)**

**Minor Assignments – 60% (Classwork, Guided Notes, Journal Notes, Projects and IXL assignments)**

**Grading Scale**

**A** = 100 – 90, **B** = 89 – 80, **C** = 79 – 75, **D** = 74 – 70, **F** = 69 – 0

**Homework**: Monday - Thursday. **(Any incomplete assigned work or required assignments)**

**Classroom Expectations and Consequences**

The teacher will discuss the classroom expectations and consequences during class with a PowerPoint Presentation. The classroom expectations and consequences PowerPoint presentation will be posted via Canvas.

**School Expectations**

**Follow all school rules and policies (P.R.I.D.E – PBIS).**

**· P – Positive**

**· R – Respectful**

**· I – Innovative**

**· D – Determined**

**· E – Excellence**

**Conferences**

The primary goal is to meet the developmental needs of each student; therefore, student progress during each grading period will be closely monitored. A Parent conference should be scheduled for all students earning D’s and F’s at the end of each nine weeks grading period. In order to schedule a conference with your teachers, please contact the Guidance Office at 706-592-2089.