**BCAM COURSE OVERVIEW: 2016-17**

**Course Title:** Common Core Algebra  
**Teacher:** Bujan/Gent  
**Grade:** 9th  
**Room #:** 322  
**Teacher BCAM Email:** fbujan@bcamhs.org  
**LGENT@BCAMHS.ORG**

## COURSE DESCRIPTION:
This is an overview of the course, including why it will be interesting for our students and what they will gain from completing the course.

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. The modules deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Growth mindset will be implemented to build confidence and independence in academic work.

## ENDURING UNDERSTANDINGS: These are the most important ideas for the course. At the end of the course, students will understand:

- How to create equations to represent relationships
- How to create graphs of linear, quadratic, and exponential functions
- How to interpret patterns, trends, and key points of functions graphed
- How to use statistical measures to understand and interpret a set of data
- How to make informed decisions in real world situation involving mathematics

## SPECIFIC ACADEMIC SKILLS: These are the most important skills for the course. At the end of this course, students will be able to:

- Read a word problem, underline key words relevant to solving the problem, and translate into mathematical symbols and expressions
- Use multiple ways to solve one problem
- Use SRE: State the answer to the problem in a full sentence  
  Reason: show math work  
  Explain what you did in precise, mathematical detail

## CCL STANDARDS: These are the important Common Core Learning Standards (in short form) that will drive the curriculum and connect to units of study and academic skills.

- Seeing Structure in Expressions
- Arithmetic with Polynomials and Rational Expressions
- Creating Equations
- Reasoning with Equations and Inequalities
- Interpreting Functions
- Interpreting Categorical and Quantitative Data
ASSESSMENTS OF SKILLS/STANDARDS: These are the major formative and summative measures that will be used to assess student progress in the course.

- Weekly Benchmark Assessments
- Classwork/Homework
- Interim Assessments
- Questioning and Discussion
- Performance Tasks

UNITS OF STUDY: These are the titles/descriptions of the primary units covered during the course.

1. Relationships Between Quantities and Reasoning with Equations and Their Graphs
2. Descriptive Statistics
3. Linear and Exponential Functions
4. Polynomial and Quadratic Expressions, Equations and Functions

TEXTS/MEDIA: This is a sampling of texts, media, and resources that will be covered/utilized in the course.

Engage NY, Khan academy, CC Regents, math videos, The Shell Center, Kahoot.it, IXL, emathinstruction.com

COURSE RULES AND GUIDELINES: These are the mechanisms that will manage the class and if followed result in student success for this course.

- Apply the growth mindset to work
- Be prepared (pencil, notebook, TI graphing calculator, graph paper)
- Respect other people and other’s property
- No late work, no exceptions.
- If you are absent, previously assigned work must be brought in completed the day after you come back. Students are responsible for missed class notes and for getting the missed work.
- Engage in studying nightly by reviewing notes, actively practicing problems, and struggling through content to acquire proficiency/mastery

COURSE HOMEWORK POLICY: This is an overview of homework distribution schedule and the process for completion and collection.

Students will be assigned homework 3-5 times a week. Homework assignments are given in order for students to review concepts taught in class that day and previously taught concepts. Homework is checked the next day, unless otherwise specified. No late work is accepted. If a student is absent, they are responsible for getting the work and class notes missed and handing it in the day after they return from their absence.