

## CCGPS Analytic Geometry

Course #: 27.0972001

**Number of Carnegie Units: 1.0**

**Semester/Year:** Fall Semester 2013-2014

**Instructors:** Byner, Roberts, Wamsted, Washington,

**Class Locations:** Various

**Tutorial Day and Time:**

**Telephone:** \_\_\_\_\_

**E-mail:** \_\_\_\_\_

### **COURSE DESCRIPTION**

The focus of Analytic Geometry on the coordinate plane is organized into 6 critical areas. Transformations on the coordinate plane provide opportunities for the formal study of congruence and similarity. The study of similarity leads to an understanding of right triangle trigonometry and connects to quadratics through Pythagorean relationships. The study of circles uses similarity and congruence to develop basic theorems relating circles and lines. The need for extending the set of rational numbers arises and real and complex numbers are introduced so that all quadratic equations can be solved. Quadratic expressions, equations, and functions are developed; comparing their characteristics and behavior to those of linear and exponential relationships from Coordinate Algebra. Circles return with their quadratic algebraic representations on the coordinate plane. The link between probability and data is explored through conditional probability. 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.

*(Prerequisite: Successful completion of Coordinate Algebra)*

### **TEXTS, READINGS, AND INSTRUCTIONAL RESOURCES**

#### **Required & Supplemental Texts:**

The Analytic Geometry Frameworks Student Edition is available online at the Georgia Department of Education Standards website at [www.georgiastandards.org](http://www.georgiastandards.org). This supplement can be accessed and/or downloaded by parents and students alike.

#### **Course Materials:**

- A pencil everyday
- Folder and binder

- Notebook Paper for Classwork

All classwork should be kept in your in-class folder so that you can use them when you are studying for tests and quizzes. All notes, warm-ups, & exit tickets should be kept in your Math 1 binder.

### **Useful Websites:**

- Georgia Department of Education Website: [www.doe.k12.ga.us](http://www.doe.k12.ga.us)
- Regents Exam Prep Center: [www.regentsprep.org](http://www.regentsprep.org)

## **ACTIVITIES AND ASSESSMENTS, EVALUATION PROCEDURES, AND GRADING**

### **Activities and Assessments:**

You will be given tests and quizzes several times a semester to determine your level of mastery and how you compare with other students in the district. For alternate assessments, you will be given in-class activities as well as out of class projects. **In May you will partake the End of Course Test for Analytic Geometry.**

### **Evaluation Procedures are school-wide.**

<b><u>1<sup>st</sup> Semester</u></b>	<b><u>2<sup>nd</sup> semester EOCT classes</u></b>
Quizzes 15%	Quizzes 18%
Exams 20%	Exams 23%
Classwork/Participation 20%	Classwork/Participation 18%
Projects 20%	Projects 23%
Sponge/Exit Tickets 10%	Sponge/Exit Tickets 6%
Homework 15%	Homework 12%
N/A	EOCT 15%

### **Grading Policy:**

A: 90 – 100%;                      B: 80 – 89%;                      C: 70 – 79%;                      F: Below 69%.

## **CLASS POLICIES & PROCEDURES**

### **1. Follow all Directions & Procedures**

### **2. Be Respectful**

- Be respectful to your teacher, all adults, and your peers.
- No profanity, put-downs, name-calling, harassment, bullying, jaywalking, horse-playing, grooming, trashketball, vandalism, etc.
- Raise your hand and wait to be acknowledged to ask a question or make a comment to the entire class.
- No food or drink allowed in the classroom.
- Cellphones and other electronic devices should not be seen or heard.

### **3. Be Prompt**

- Be inside the classroom, seated and ready to begin when the bell rings.

### **4. Be Prepared**

- Arrive to class with all required materials and assignments.
- Be dressed for success.

### **5. Be Productive**

- Use your time efficiently from bell to bell.
- Participate! Participate! Participate!
- The bell does not dismiss you. Remain seated until you are dismissed.
- Clean your learning environment before leaving the classroom.

## **CONSEQUENCES**

1. **First Offence:** Reminder/Warning
2. **Second Offence:** Student Conference
3. **Third Offence:** Parent Contact/Conference
4. **Fourth Offence:** Discipline Referral

**\*For Extreme Behavior, a Discipline Referral will be earned regardless of warning\***

## **ACADEMIC HONESTY**

Students are expected to adhere to the highest standards of academic honesty. Plagiarism occurs when a student uses or purchases ghost-written papers or products. It also occurs when a student utilizes ideas or information obtained from another person without giving credit to that person. If plagiarism or another act of academic dishonesty occurs, it will be dealt with in accordance with the academic misconduct policy as stated in the Atlanta Public Schools Handbook and the Benjamin E. Mays High School Handbook.

CLASS CALENDAR/OUTLINE (Tentative)

Week #	Major assignments (i.e. research papers, projects, portfolios)	Due Date	Readings for class Additional assignments, etc.
1-3	Unit 2 Right Triangle Trigonometry		Quiz at 2 and ½ week mark; Pythagorean Spiral Project
4	Unit 1 Similarity, Congruence, and Proofs		
5	Review and Test		Culminating Task; 5 week Exam
6-9	Unit 1 Similarity, Congruence, and Proofs cont.		Quiz at the 7 and ½ week mark
10	Review and Test		Culminating Task; Midterm Exam
11-12	Unit 1 Similarity, Congruence, and Proofs cont.		Math Mini Project
13-14	Unit 3 Circles and Volume		
15	Review and Test		Culminating Task; Semester Midterm
16-17	Unit 3 Circles and Volume cont.		
18	Unit 4 Extending the Number System		
19	Review and Test		Semester Final Exam

**COMMON CORE MATHEMATICS STANDARDS**

Available at [www.georgiastandards.org](http://www.georgiastandards.org)