

**Peachtree Charter Middle School**  
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**Accelerated GSE Coordinate Algebra/Analytic Geometry A Course Syllabus**

**Course Description:** This is the first in a sequence of mathematics courses designed to prepare students to take AB or BC Advanced Placement Calculus and AP Statistics. It includes the study of coordinate algebra, linear and exponential functions, proofs, trigonometry, and circles and volume. The course moves the study of quadratic functions to the tenth grade accelerated course. As such, only addition, subtraction, and multiplication of polynomials will be introduced during the last unit of study in May. Topics will be represented in multiple ways, such as concrete/pictorial, verbal/written, numeric/data-based, graphical, and symbolic methods. Concepts will be introduced and used, where appropriate, in the context of realistic phenomena.

The fundamental purpose of Accelerated GSE Coordinate Algebra/Analytic Geometry A is to formalize and extend the mathematics that students learned in the middle grades. The critical areas, organized into units, deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend. 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 and rounds out the course. The Mathematical Practice Standards apply throughout each topic 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.

Semester One	Semester Two
Transformations in the Coordinate Plane	Relationships Between Quantities
Connecting Algebra/Geometry Through Coordinates	Reasoning with Equations and Inequalities
Similarity, Congruence, and Proofs	Linear and Exponential Functions
Right Triangle Trigonometry	Describing Data
Circles and Volume	Extending the Number System
The Georgia Standards of Excellence can be found at <a href="https://www.georgiastandards.org/Georgia-Standards/Frameworks/Acc-Coordinate-Algebra-Analytic-Geometry-A-Standards.pdf">https://www.georgiastandards.org/Georgia-Standards/Frameworks/Acc-Coordinate-Algebra-Analytic-Geometry-A-Standards.pdf</a>	

**Standardized Test Requirements:** Standards which would aid students on the 8<sup>th</sup> grade Georgia Milestones assessment are embedded throughout the curriculum. **Students must meet the minimum state established scores on the 8<sup>th</sup> grade Georgia Milestones test in order to be promoted to ninth grade.**

In addition, students in this course must also take an end of course test (EOC Georgia Milestones). According to State Code 160-4-2-.13,

- All students who take an EOC Milestones course shall take the End of Course Milestones and it shall count as the final exam for the second semester.
- The EOC Milestones will count 20% of the second semester grade.
- Any student who fails second semester of Accelerated Coordinate Algebra/Analytic Geometry A must re-take the EOC Milestones at whatever point they make up the course.
- Any student enrolled in and/or receiving credit for an EOC Milestones course, regardless of grade level or grade in the course will be required to take the EOC Milestones during the testing windows specified by the state.

**Textbook:** Coordinate Algebra/Analytic Geometry A (Holt McDougal). If the textbook or any associated workbooks are lost, stolen, or damaged (missing barcode), it is the student's responsibility to pay for the book before a replacement book is issued. In the event that the lost book is found, please retain all receipts. In addition to the textbook, student resources will include Georgia Department of Education Frameworks Tasks and tasks from the Mathematics Assessment Project. Students are also expected to register for the online textbook at [my.hrw.com](http://my.hrw.com). There are PDFs of the various student texts so students may print additional copies of assignments if necessary. Instructions for accessing the online texts will be given to the students as soon as they become available.

## The DeKalb County School System Grading Scale

A: 100-90      B: 80-89      C: 71-79      D: 70      F: 69 and below

### Weighted Averages

**Classwork/Homework:** 20%

**Assessments** (including projects): 60%

**\*Final:** 20%

\*(1<sup>st</sup> semester - cumulative semester exam; 2<sup>nd</sup> semester – EOC Milestones over Coordinate Algebra only)

- **Homework** - Homework is expected to be completed as assigned with an honest effort made. While collaborating and obtaining help from peers is encouraged, collaboration is not the same as copying. Any student caught copying homework or allowing another student to copy the homework will receive a 0 (see academic honesty below). Tutoring is available at the times indicated on my website.
- **Work product** - In order to receive credit for any assignment, you must show work. If no work is shown, you will receive **no credit** for your answer – even if it is correct.
- **Make-up work:** Announced work, such as homework, quizzes, tests, and other major assessments are due the day the student returns. For each day's excused absence, student will have one day to make up missed work. If a student is absent under extenuating circumstances, special arrangements can be made to make up work. **IT IS THE STUDENT'S RESPONSIBILITY TO REQUEST MISSED WORK.**
- **Academic honesty:** Receiving or giving information for an assignment is cheating, and when caught in the act, students will not receive credit nor receive the opportunity for a chance for make up. **Plagiarism is not acceptable.** If a student takes information from the Internet or any printed resource without a citation, it is considered plagiarism and will result in a reduction in grade. A referral to the appropriate assistant principal will be forwarded.

**Supply List:** See website

### **Classroom Expectations**

- Begin working on the day's assignment as soon as you enter the room.
- Bring all needed materials to class.
- Follow all directions the first time given.
- **All work will be done in pencil. Any work done in pen will result in a deduction of 10 points and will be returned to be redone in pencil.**
- Be respectful to everyone in the class.
- No eating or drinking in class.
- **Student must adhere to the DCSS Student Code of Conduct, as well as specific classroom rules.**
- Dress in accordance with DeKalb County and PCMS dress code standards.

### **Important Dates:**

August 10	First day of school	October 14	PSAT
August 25	Open House 6:45 – 8:30	October 15	9 week progress report
September 7	Labor Day – no school	October 22	Conference Night 4:30 – 6:30
September 10	Curriculum Night 5:30 – 6:30	November 16	13.5 week progress report
September 15	4.5 week progress report	November 23 – 27	Thanksgiving holidays
September 24	Conference Night 4:30 – 6:30	December 16 – 18	Final Exams
October 12	Columbus Day – no school		

**\* I reserve the right to adjust the course work and/or differentiate instruction as needed to meet the needs of students and ensure academic success.**

**I look forward to working with you and your child in 2015! - Peggy Bussert, Math Teacher**