GSE Analytic Geometry
Course Syllabus
2015-2016
Dutchtown High School

Teacher: Pamela Brown-Henry Room 218 School (770) 515-7510
Email address: pamela.brown@henry.k12.ga.us

Text: Georgia Department of Education Analytic Geometry GSE Frameworks

Supplies:

Three Ring Binder	Pencils (no work should be done in pen)	Ruler
Graph Paper	*Scientific Calculator	Notebook Paper
Highlighter	Compass	Notebook dividers
2 Dry Erase Markers	Colored pencils	

***** *Students should have either a scientific or graphing calculator. Graphing calculators are allowed on the Georgia Milestones (EOC) and will be incorporated in classroom instruction. The TI-36X Pro has algebraic and statistical capabilities that students have found particularly helpful in class and on previous state assessments, so instruction will be given on this model, but* ***any scientific or graphing calculator will be fine****.*

Course Description / Content:

GSE Analytic Geometry is the second in a sequence of courses designed to ensure that students are prepared to study higher-level mathematics. GSE Analytic Geometry is organized into 7 units. 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. Quadratic expressions, equations, and functions are developed; their characteristics and behavior are compared 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 the course and, together with the content standards, encourage students to experience mathematics as a coherent, useful, and logical subject.

1st Semester	**2nd Semester**
Unit 1: Similarity, Congruence and Proofs	**Unit 5:** Quadratic Functions
Unit 2: Right Triangle Trigonometry	**Unit 6:** Modeling Geometry
Unit 3: Circles and Volume	**Unit 7:** Applications of Probability
Unit 4: Extending the Number System	

Grading Procedure: Formative Assessments will assist students in self-assessment of mastery of standards, but do not contribute directly to the standards-based grade. Summative Assessments are tasks, quizzes and tests pertaining to each of the bold standards categories. The standards categories will be equally weighted, but test grades within each category will receive more weight than other category components.

Final Grade = 80% Average Grade on work completed prior to exam + 20% Course Exam

Grading Scale:
A = 90-100 B = 80-89 C = 74-79 D = 70-73 F = 0-69

Infinite Campus:
Grades will be uploaded to the online gradebook, *Infinite Campus,* on a regular basis. Each student will have a log-in. Parents will need to have a log-in as well. Students will be required to set up a student account on *Infinite Campus* and are strongly encouraged to monitor their mastery of standards on a regular basis.

Grading:

Classwork/Mathematical Practice
Assignments will be made daily and are designed to help students understand, practice and apply the standards prior to being formally assessed on the standards. They should be used as an indication of whether further assistance is needed on a standard/topic.

Tasks/Quizzes/Tests/Project (80%)
Quizzes over one to three elements of the standards will be given at least weekly. Unit tests over multiple elements will be given about every three weeks. Items on tests and quizzes will be graded by standard and grades will be recorded by standard. "Test 1" may appear as a grade under several standards, reflecting an average of the standards' items from the test. You will not see a grade for the entire "Test 1."

Recovery
At the end of a unit, students will be allowed to do recovery over standards that were not mastered. In order to do so, the student will have to complete an assigned remediation/review assignment on USATest Prep or by means determined by the teacher, then make an appointment with the teacher to re-assess the standard(s). The grade (up to 80%) the student receives on the re-assessment will be used to replace the grade for the standard not mastered, if it is better.

Final Exam/Georgia Milestone (EOC) (20%)
At the end of the second semester, all students will take a District or teacher-created exam covering the units from both semesters. Additionally, all students will take the GSE Analytic Geometry Georgia Milestone (EOC) over all of the units in May 2016.

Notebook
Notebooks should contain the course syllabus, vocabulary, all notes and assignments completed from each unit. It will be helpful to use dividers to separate your units. Your notebook should be updated and brought to class every day. It will be an essential tool as you begin to prepare for the end of semester assessments.

Make-up Procedure: (Per student handbook)
It is the student's responsibility to make arrangements for make-up work. The number of days allowed to complete make-up work will be one day for each day absent, unless determined otherwise by the principal. Failure to comply with this make-up procedure will result in a zero (0) being given for work and graded assignments missed during an excused absence. **Students with an unexcused absence will not be allowed to make up work and graded assignments missed during the unexcused absence**. Students with excused absences may arrange with the teacher for extra help if an extended absence is unavoidable. Students who have an absence on the day of a test should come prepared to take that test the day they return to school. In addition,

if the student was informed prior to the absence date of a test, the student is required to take the test upon return. Tests may be made up after regular school hours.

Tutoring:

Tutoring is available Monday after school from 3:45 – 4:30 p.m. in room 218. **Please encourage your child to attend as needed**. If they cannot attend on this day it is their responsibility to make arrangements to get assistance from another math teacher or set an appointment with me for another day.

Classroom Rules:

1. Be Prompt – Be on time and begin working on the warm-up activity immediately; do not linger in the hallways. Class begins promptly, and we work from bell to bell. Wait for dismissal by the teacher.
2. Be Prepared – Come to class prepared to learn. Bring your textbook, notebook, pencil(s), and calculator every day.
3. Be Productive – Leave class knowing more than what you did when you came in.
4. Be Polite – Do unto others as you would have them do unto you. Respect yourself, respect all others, and respect your learning environment at all times! Do not bring food, drink or gum into the classroom. Respect other adults in the building by being quiet during announcements and when teacher is addressed via the intercom.

Procedure for enforcing class, school, and county rules:
(For definitions of Section I, II, and III offenses see student handbook.)

1) For any offense of classroom rules: **4-step process**

First offense:	conference with student
Second offense:	parental contact
Third offense:	parental contact
Fourth offense:	referral to administration

2) For any offense that falls into SECTION I, II, or III:

First offense:	Referral to administration

The teacher reserves the right to make changes to the syllabus as needed. When updates are done they will be reposted to the teacher's webpage.

Dear Parents,

In an effort to keep you informed about your child's performance in Analytic Geometry district-wide progress reports will be sent home according to the following schedule. However, if your child has an average of 75 or below I will be sending a progress report generated from Infinite Campus home for you to sign and return. I also encourage you to call the guidance office and set up a parent conference.

FIRST SEMESTER	SECOND SEMESTER
August 25	February 2
September 15	March 1
October 13	March 22
November 10	April 19
December 1	May 10

Your child should keep graded papers in his/her notebook, but should also be checking *Infinite Campus* weekly. If at any point in the year you have a question or concern, please do not hesitate to contact me at school (770-515-7510) or by email at pamela.brown@henry.k12.ga.us

Thank you,
Pamela Brown-Henry

PARENT RECEIPT OF SYLLABUS, STANDARDS, AND PROGRESS REPORT SCHEDULE

Please follow the link below to acknowledge that you have received the course syllabus, standards and progress report for GSE Analytic Geometry or complete the acknowledgement below, clip it from this sheet and return to Mrs. Brown-Henry. Completing the form electronically will ensure accuracy of the information.

http://goo.gl/forms/a5DjZxQp7n

PARENT RECEIPT OF SYLLABUS, STANDARDS, AND PROGRESS REPORT SCHEDULE

I have seen the syllabus for **Analytic Geometry** and the schedule for progress reports.

Student Name (Please print) _____

Parent's Name (Please print) _____

Parent's Signature _____ Date _____

Parent's Preferred Method of Contact _____ by phone _____ by e-mail

Daytime Number _____ Evening Number _____

Parent E-mail Address _____

Analytic Geometry Standards

Standards	Description	Unit(s) Taught	
MGSE9-12.G.SRT.1, 2, 3, 4, 5	Similarity and Dilations	1	
MGSE9-12.G.CO.6, 7, 8	Transformations/Triangle Congruence	1	
MGSE9-12.G.CO. 9, 10, 11; G.GPE.4	Proving Geometric Theorems	1	
MGSE9-12.G.CO. 12 & 13	Geometric Constructions	1	
MGSE9-12.G.SRT. 6, 7, 8	Trigonometric Ratios/Pythagorean Theorem	2	
MGSE9-12.G.C. 1, 2, 3, 4	Circle Theorems	3	
MGSE9-12.G.C.5 MGSE9-12.G.GMD.1, 2, 3	Arc Lengths, Area of Sector, and Volume	3	
MGSE9-12.N.RN.2, 3; A.APR.1	Rational/Irrational Numbers; Polynomial Operations & Radicals	4	
MGSE9-12.A.SSE.1 – 3, A.REI.4,	Factoring & Solving Quadratics	5	
MGSE9-12.F.IF.4 – 9,	Characteristics & Applications of Quadratic Functions	5	
MGSE9-12.A.CED.1, 2, 4; F.BF.1, 3; F.LE.3; S.ID.6	Creating & Building Quadratics/ Interpret Data	5	
MGSE9-12.G.GPE.1; G.MG.1 – 3	Modeling Geometry	6	
MGSE9-12.S.CP.1 – 7	Probability	7	