Honors GSE Analytic Geometry Course Syllabus 2015-2016 Dutchtown High School

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Text: Georgia Department of Education Analytic Geometry GSE Frameworks

Supplies:

Three Ring Binder	Pencils (no work should be	Ruler
	done in pen)	
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. **Note: The Honors course will cover the same content, but will include more rigor and**

enrichment. Pacing of the Honors course will also be faster.

1 st Semester	2 nd 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%)

The course standards will be mastered through the completion of tasks and related practice. Quizzes over one to three elements of the standards will be given at least weekly. AP classes are test driven and, as an honors class, this is a Pre-AP course. Since test grades reflect the understanding achieved by the end of the unit, test grades will be weighted more than other assignments. 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."

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. Additonally, 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:

2)

- 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		
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