

COURSE SYLLABUS: GSE Algebra 1

COURSE NUMBERS: 27.0990000-2

Semester/Year: 2020-2021

Instructor: Ms. Mai Nguyen

Class Location: Google Classroom (Please see your County Gmail for invitation)

Class Meets at: 2nd Block: 10:15 am

Tutorial Day and Time: Every Wednesday 3:00-3:45 PM

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Teacher's Website: https://003.clayton.k12.ga.us/teacher_sites/mathematics/ms_nguyen

Textbooks: Algebra 1 Common Core

& enVision Algebra 1

Textbook website: www.pearsonrealize.com

COURSE DESCRIPTION:

Algebra I is the first course in a sequence of three required high school courses designed to ensure career and college readiness. The course represents a discrete study of algebra with correlated statistics applications.

The standards in the three-course high school sequence specify the mathematics that all students should study in order to be college and career ready. Additional mathematics content is provided in fourth credit courses and advanced courses including pre-calculus, calculus, advanced statistics, discrete mathematics, and mathematics of finance courses. High school course content standards are listed by conceptual categories including Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Conceptual categories portray a coherent view of high school mathematics content; a student's work with functions, for example, crosses a number of traditional course boundaries, potentially up through and including calculus. Standards for Mathematical Practice provide the foundation for instruction and assessment.

Course Description:

Unit 1: As in Algebra 1, students will interpret the structure of expressions and solve problems related to unit analysis. The properties of rational and irrational numbers and operations with polynomials have been added as a preparation for working with quadratic functions later in the course. This content will provide a solid foundation for all subsequent units.

Unit 2: Students will analyze linear functions only. Students will (1) investigate key features of graphs; (2) create, solve, and model graphically linear equations and inequalities in one and two variables; (3) create, solve, and model graphically systems of linear equations and inequalities in two variables; (4) rearrange formulas to highlight a quantity of interest (5) recognize arithmetic sequences as linear functions. Some standards will be repeated in units 3, 4, and 5 as they apply to quadratics and exponentials. (Recall that many of the standards are extensions of middle school standards.)

Unit 3: Students will analyze quadratic functions only. Students will (1) investigate key features of graphs; (2) solve quadratic equations by taking square roots, factoring $(x^2 + bx + c \text{ AND } ax^2 + bx + c)$, completing the square, and using the quadratic formula; (3) compare and contrast graphs in standard, vertex, and intercept forms. Students will only work with real number solutions.

Unit 4: Students will analyze exponential functions only. Students will (1) investigate key features of graphs; (2) create, solve, and model graphically exponential equations; (3) recognize geometric sequences as exponential functions.

Unit 5: Students will compare and contrast linear, quadratic, and exponential functions in this unit.

Unit 6: Students will summarize, represent, and interpret data on a single count or measurement variable. Students will summarize, represent, and interpret data on two categorical and quantitative variables. Students will interpret linear models.

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.

Course Prerequisites:

Course Outline:

Unit 1	Relationships Between Quantities and	Unit 4	Modeling and Analyzing Exponential
	Expressions		Functions
Unit 2	Reasoning with Linear Equations and	Unit 5	Comparing and Contrasting Functions
	Inequalities		
Unit 3	Modeling and Analyzing Quadratic Functions	Unit 6	Describing Data

^{*} The teacher reserves the right to alter or change any part of this course syllabus to better suit the need of the students.

Materials Needed

1 Notebook paper

Loose Leaf Paper

LEARNING OUTCOMES

The learning outcomes are derived directly from the Georgia Department of Education. https://www.georgiastandards.org/Georgia-Standards/Frameworks/Foundations-of-Algebra-Standards.pdf

TEXTS, READINGS, AND INSTRUCTIONAL RESOURCES

Useful Websites:

www.usatestprep.com www.khanacademy.com www.ixl.com www.desmos.com

www.mathbitsnotebook.com

ACTIVITIES AND ASSESSMENTS, EVALUATION PROCEDURES, AND GRADING

<u>Activities and Assessments:</u> This course will consist of 2 projects, 7 Quizzes, 3 Tests and 1 comprehensive Final Exam. *You may drop your lowest Test grade if you have 0 Early Exits and 0 Cell Phone Policy violations at the end of the semester.* In addition, your final exam grade (if the final grade happens to be higher, of course) can replace another Exam grade at the end of the semester.

SENIOR EXIT PORTFOLIO:

The CCPS Senior Exit Portfolio is a requirement for all 12th grade students taking the 12th grade British Literature and Composition course. Throughout the senior year, students will collect assignments, performance tasks, writings, assessments, and college/career preparation documents to complete their CCPS senior exit Portfolio. The CCPS Senior Portfolio integrates tasks that require knowledge gained from English, Social Studies, Science, Math, and Career Technical Agricultural Education (CTAE) courses. Teachers are required to facilitate adherence to the periodic due dates to ensure that students meet the final requirement of a portfolio that represents their best work and learning experiences. Teachers will use a digital resource to assist students in the management and maintenance of the portfolio throughout the year. The CCPS Senior Exit Portfolio is comprised of the following: biography, personal goals, college/career package, education philosophy, and independent study. At the end of the school year, students are required to deliver a formal presentation of the portfolio using presentation type software.

Evaluation Procedures:

High School and High School Credit Bearing Courses Grade Weights			
Courses with an End-o	f-Course (EOC) Exam	Courses without an End-of-Course (EOC) Exam	
Classwork	25%	Classwork	25%
Tests/Quizzes	30%	Tests/Quizzes	30%
Projects	10%	Projects	10%
Homework	15%	Homework	15%

End-of-Course Exam 20%	Final Exam	20%
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Grading Policy:

Letter Grade	Performance Level	Description of Performance Level
A	90-100	Exceeding content expectations
В	80-89	Meeting content expectations
С	71-79	Working towards meeting content expectations
D	70	Inadequate progress towards meeting content expectations
F	69 and below	Did not meet content expectations
NC	No Credit	Enrolled 10 days or less
Ι	Incomplete	Course requirements not completed

Class Policies

Conferences (Parent-Teacher)

Parent-teacher conferences will be scheduled through the Counseling Office by calling (404) 362-3872. Conferences are generally scheduled once a week at 3:15pm in the cafeteria and must be set up by the Friday prior to the conference date.

Behavior Expectations:

- 1. **Be Punctual** for being early is on time, being on time is late and being late is unacceptable
- 2. **Be Polite** for everyone you meet is fighting a hard battle.
- 3. **Be Prepared** for it prevents poor performance.
- 4. **Be Productive** for successful people make wise decisions.

School Rules: Make sure you are following dress code and no eating or electronic devices in the classroom.

Tardy Policy

1st Offense: Warning

2nd Offense: Student Conference

3rd Offense: Parent Contact

4th Offense: Teacher Detention

5th Offense: Parent Conference

6th Offense: Office Referral

MAKE-UP WORK POLICY:

All students are provided an opportunity to make up missed assignments, regardless of the reason for the absences. it is the student and parent's responsibility to make arrangements and/or complete all work within three school days of the student's return to school. Students will present the make-up work to the teacher for grading. Grading for the make-up work should be shared with the student within a reasonable period, i.e. 3-5 days. It is the parent and student's responsibility, as appropriate, to initiate the make-up work for missed assignments, tests, and class work. Students must assume responsibility for obtaining the required information and making whatever arrangements are necessary with the teacher. Parents should assist their child with requests for make-up work and other missed assignments and tests.

Students may arrange times with the teacher for making up work for the mutual convenience of student and teacher. Make-up of tests/quizzes should be done before or after school except otherwise arranged by the teacher. Teachers may assign different work or a different test than that which was originally assigned to other students. It is critical that parents remain involved in this process to ensure academic success for the student. Long-term assignments with preset dates are due on the assigned dates, regardless of a student's previous absence.

Parent-Teacher Conferences:

Parents can contact the student's grade level counselor to schedule a parent-teacher conference.

9th Grade: Ms. Corell and Mr. Williams 10th Grade: Ms. White 11th Grade: Ms. Jenkins 12th Grade: Dr. Pope

Infinite Campus Access:

Parents can access their student's grades and attendance online via Infinite Campus Parent Portal. Please see the parent liaison, Mr. Clifton at extension 503137 to obtain their username and password.

Grade Reporting:

Progress reports are issued every <u>four and one-half weeks</u> within each nine week grading period. Report cards are issued every eighteen weeks at the high school level. Report card grades will include both letter and numeric grades for all students.

Progress Report Dates:

Semester One: September 3 October 13 November 16 January 6 Semester Two: February 9 March 16 April 26 May 28

CLASS OUTLINE/CALENDAR (Tentative)

Tentative Class Outline

Week	Topic/Unit of Study	Test
Week 1	Back to School Introductions	
08/10 - 08/14	8th Grade Math Review	
Week 2	Unit 1 - Relationships between Quantities	
08/17 - 08/21	155 20 15 15 15 1 4 200 15 15 15 15 15 15 15 15 15 15 15 15 15	
Week 3	Unit 1 - Relationships between Quantities	Unit 1 Test 08/27

08/24 - 08/28		
Week 4 08/31 – 09/04	Unit 2 - Reasoning with Linear Equations & Inequalities	
Week 5 09/07 - 09/11	Unit 2 - Reasoning with Linear Equations & Inequalities	MAP Growth Pre-Assessment
Week 6 09/14 – 09/18	Unit 2 - Reasoning with Linear Equations & Inequalities	Unit 2 Test
Week 7 09/28 – 10/02	Unit 3 - Modeling & Analyzing Quadratic Functions	
Week 8 10/05 – 10/09	Unit 3 - Modeling & Analyzing Quadratic Functions	
Week 9 10/12 – 10/16	Unit 4-Modeling & Analyzing Exponential Function	Unit 3 Test
Week 10 10/19 – 10/23	Unit 4-Modeling & Analyzing Exponential Function	
Week 11 10/26 – 10/30	Unit 4-Modeling & Analyzing Exponential Function	
Week 12 11/02 – 11/06	Unit 5 - Comparing & Contrasting Functions	Unit 4 Test
Week 13 11/09 – 11/13	Unit 5 - Comparing & Contrasting Functions	MAP Growth Post-Assessment
Week 14 11/16 – 11/20	Unit 6 - Describing Data	Unit 5 Test
Week 15 11/30 – 12/04	Unit 6 - Describing Data	Unit 6 Test
Week 16 12/07 – 12/11	Algebra I Course Review	
Week 17 12/14 – 12/18	Final Exam Week	End of Course Test

ACADEMIC INTEGRITY

Students are expected to submit work for evaluation that has been completed solely by that student, unless group assignments have been so designated. Academic integrity is expected at all times. If a student is found cheating on a graded assignment, the student will not receive credit for that assignment and will face possible disciplinary action. Cheating and plagiarism are considered very serious academic offenses. Any student who plagiarizes or cheats on an assignment and/or test should be referred to the administrator.

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